

# SHARP®

## ELECTRONIC CASH REGISTER

MODEL

# ER-A410 ER-A420

## INSTRUCTION MANUAL



The above illustration shows the model ER-A410.

**CAUTION:**

The cash register and the remote drawer should be securely fitted to the supporting platforms to avoid instability when the drawers are open.

**CAUTION:**

The socket-outlet shall be installed near the equipment and shall be easily accessible.

**VORSICHT:**

Die Netzsteckdose muß nahe dem Gerät angebracht und leicht zugänglich sein.

**ATTENTION:**

La prise de courant murale devra être installée à proximité de l'équipement et devra être facilement accessible.

**AVISO:**

El tomacorriente debe estar instalado cerca del equipo y debe quedar bien accesible.

**VARNING:**

Det matande vägguttaget skall placeras nära apparaten och vara lätt åtkomligt.

**CAUTION:**

For a complete electrical disconnection pull out the mains plug.

**VORSICHT:**

Zur vollständigen elektrischen Trennung vom Netz den Netzstecker ziehen.

**ATTENTION:**

Pour obtenir une mise hors-circuit totale, débrancher la prise de courant secteur.

**AVISO:**

Para una desconexión eléctrica completa, desenchufar el enchufe de tomacorriente.

**VARNING:**

För att helt koppla från strömmen, dra ut stickproppen.

This equipment complies with the requirements of Directives 89/336/EEC and 73/23/EEC as amended by 93/68/EEC.

Dieses Gerät entspricht den Anforderungen der EG-Richtlinien 89/336/EEG und 73/23/EEG mit Änderung 93/68/EEG.

Ce matériel répond aux exigences contenues dans les directives 89/336/CEE et 73/23/CEE modifiées par la directive 93/68/CEE.

Dit apparaat voldoet aan de eisen van de richtlijnen 89/336/EEG en 73/23/EEG, gewijzigd door 93/68/EEG.

Dette udstyr overholder kravene i direktiv nr. 89/336/EEC og 73/23/EEC med tillæg nr. 93/68/EEC.

Quest' apparecchio è conforme ai requisiti delle direttive 89/336/EEC e 73/23/EEC, come emendata dalla direttiva 93/68/EEC.

Η εγκατάσταση αυτή ανταποκρίνεται στις απαιτήσεις των οδηγιών της Ευρωπαϊκής Ένωσης 89/336/ΕΟΚ και 73/23/ΕΟΚ, όπως οι κανονισμοί αυτοί συμπληρώθηκαν από την οδηγία 93/68/ΕΟΚ.

Este equipamento obedece às exigências das directivas 89/336/CEE e 73/23/CEE, na sua versão corrigida pela directiva 93/68/CEE.

Este aparato satisface las exigencias de las Directivas 89/336/CEE y 73/23/CEE, modificadas por medio de la 93/68/CEE.

Denna utrustning uppfyller kraven enligt riktlinjerna 89/336/EEC och 73/23/EEC så som komplette ras av 93/68/EEC.

Dette produktet oppfyller betingelsene i direktivene 89/336/EEC og 73/23/EEC i endringen 93/68/EEC.

Tämä laite täyttää direktiivin 89/336/EEC ja 73/23/EEC vaatimukset, joita on muutettu direktiivillä 93/68/EEC.

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# INTRODUCTION

Thank you very much for your purchase of the SHARP Electronic Cash Register, Model ER-A410/A420. Please read this manual carefully before operating your machine in order to gain full understanding of functions and features. Please keep this manual for future reference. It will help you, if you encounter any operational problems.

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## IMPORTANT

- **Install your register in a location that is not subject to direct sunlight, unusual temperature changes, high humidity or exposure to water sources and keep away from heat and magnetic sources.**  
Installation in such locations could cause damage to the cabinet and the electronic components.
- **The register should not be operated by an individual with wet hands.**  
The water could seep into the interior of the register and cause component failure.
- **When cleaning your register, use a dry, soft cloth. Never use solvents, such as benzine and/or thinner.**  
The use of such chemicals will lead to discoloration or deterioration of the cabinet.
- **The register plugs into any standard wall outlet (Official (nominal) voltage).**  
Other electrical devices on the same electrical circuit could cause the register to malfunction.
- **If the register malfunctions, call your local dealer for service - do not try to repair the register yourself.**
- **For a complete electrical disconnection, pull out the mains plug.**

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## PRECAUTION

This Electronic Cash Register has a built-in memory protection circuit which is operated by rechargeable batteries.

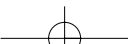
As you know, all batteries will, in time, dissipate their charge even if not used. Therefore to insure an adequate initial charge in the protection circuit, and to prevent any possible loss of memory upon installation, it is recommended that each unit be allowed to recharge for a period of 24 to 48 hours prior to use by the customer. In order to charge the batteries, the machine must be plugged in. This recharging precaution can prevent unnecessary initial service calls.

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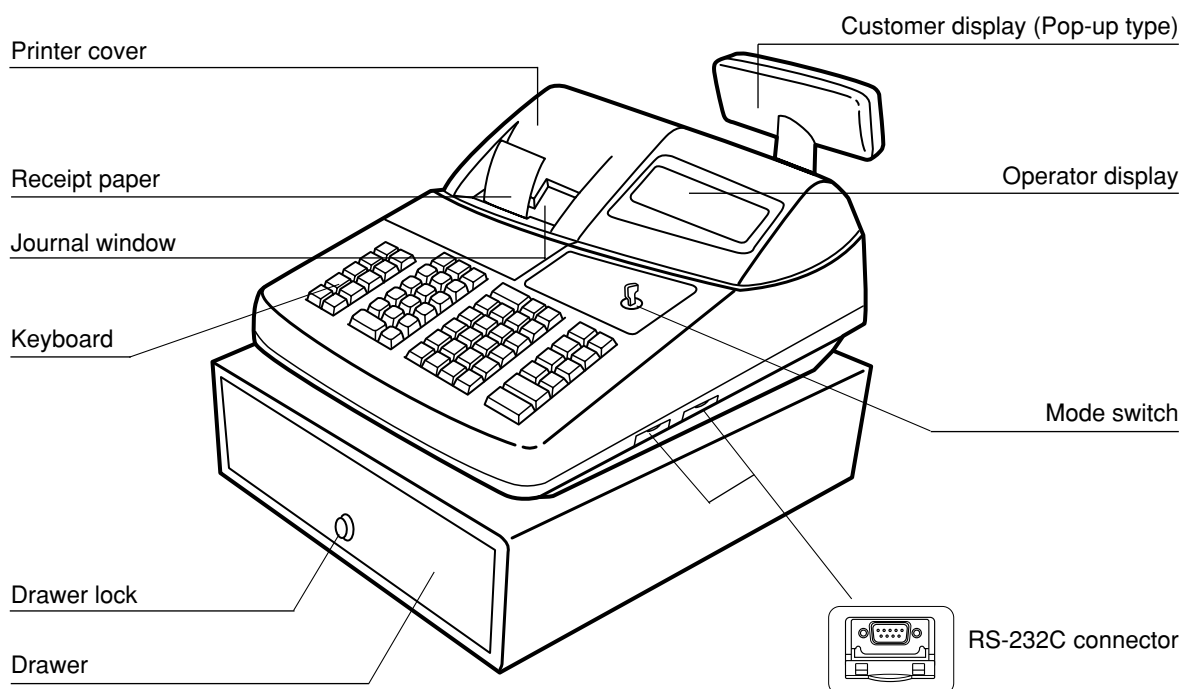
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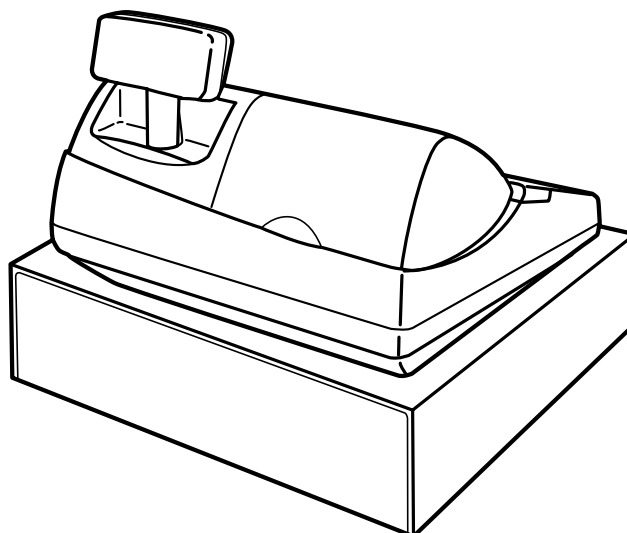


# EXTERNAL VIEW OF THE ER-A410

## ■ Front view

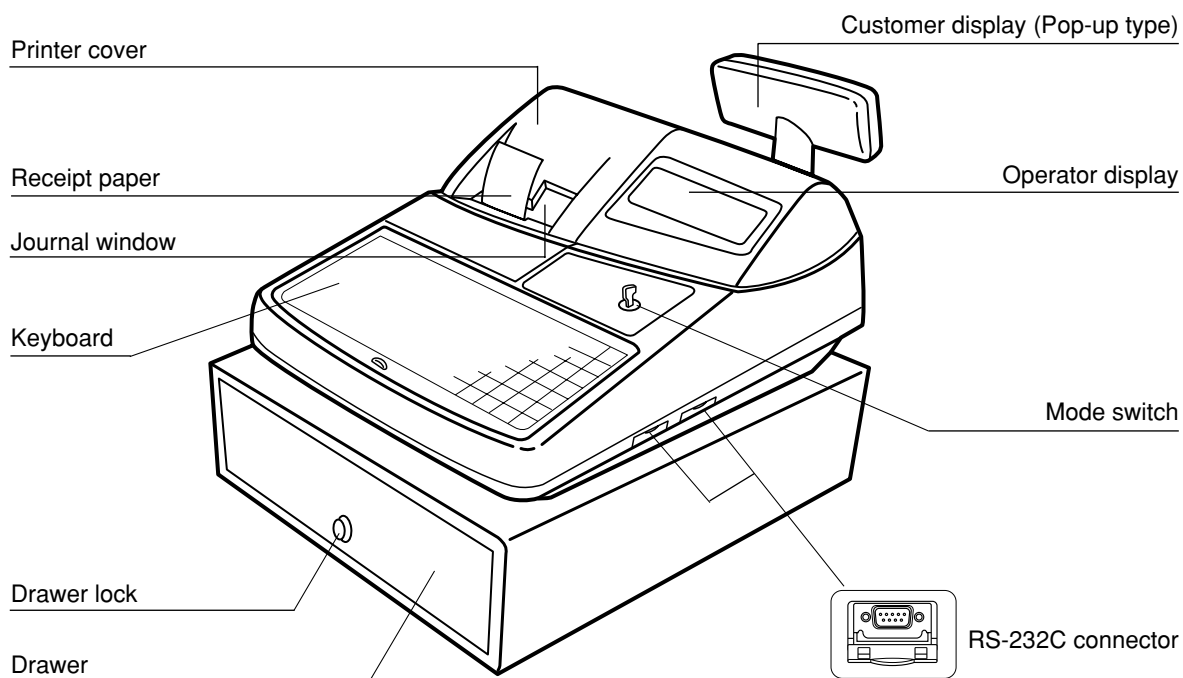


## ■ Rear view

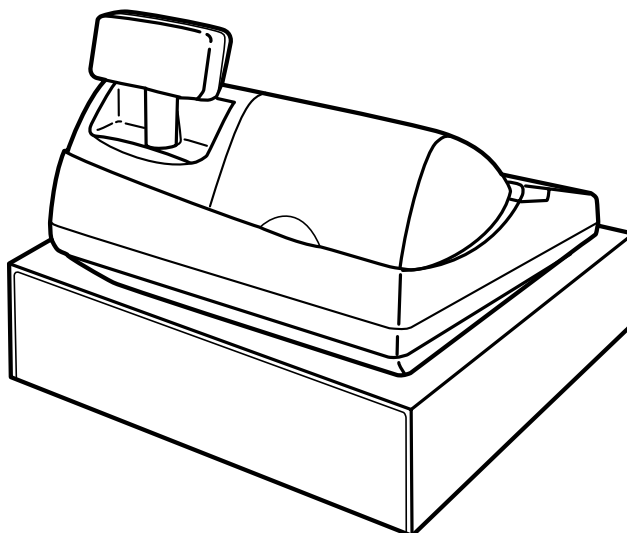


# EXTERNAL VIEW OF THE ER-A420

## ■ Front view



## ■ Rear view



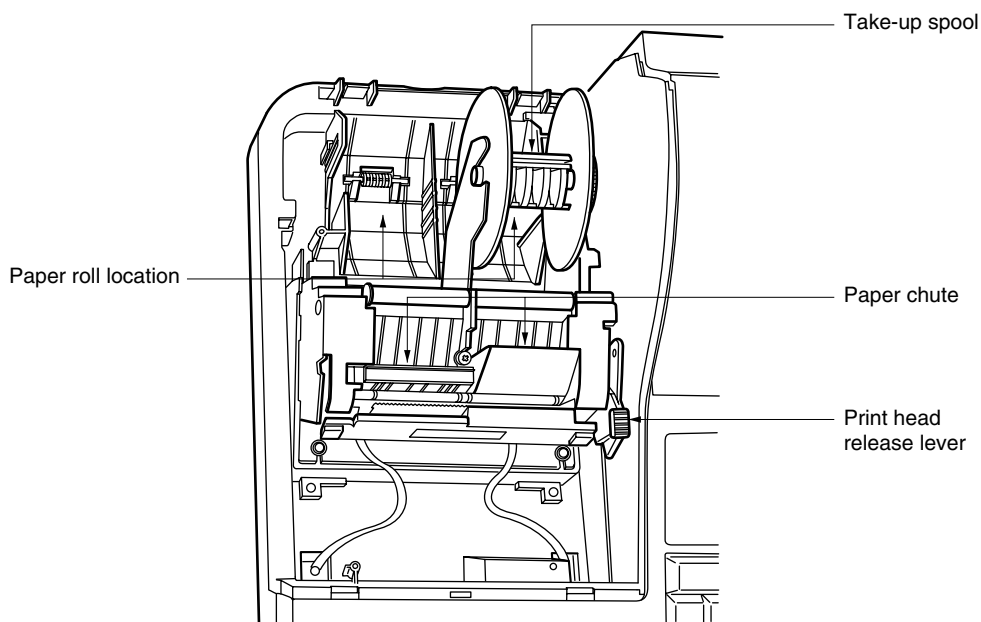
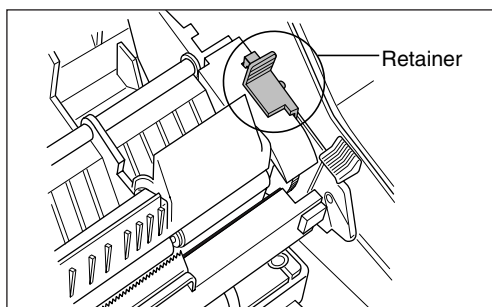
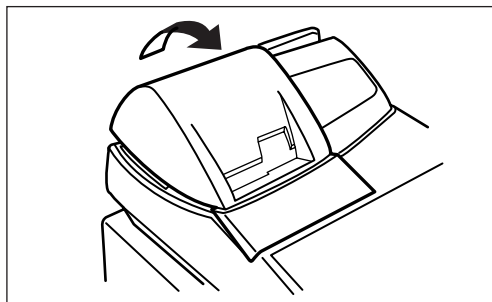
# PRINTER

The printer is a receipt/journal dual station type thermal printer, and therefore it does not require any type of ink ribbon or cartridge. The average life of the printer is approximately 5 million lines.

When removing the printer cover, lift up its rear.  
When installing the printer cover, hook it on the pawls on the cabinet and shut it.

**Caution:** *The paper cutter is mounted on the printer (receipt side). Be careful not to cut yourself.*

Your register is shipped with the print head release lever held by a white retainer in the lifted up position. Be sure to remove this retainer (see the figure at the right) and push down the print head release lever before you use the register.



## Print head release lever

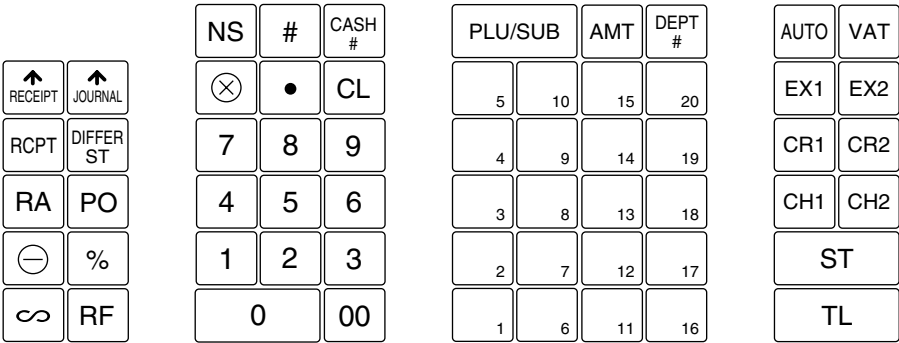
The print head can be lifted by the green lever on the right side of the printer. Pulling the lever forward lifts the print head up. If the paper becomes jammed and you need to move the head farther forward, you can pull the lever even further toward you and proceed with the removal of the jammed paper.

### Note

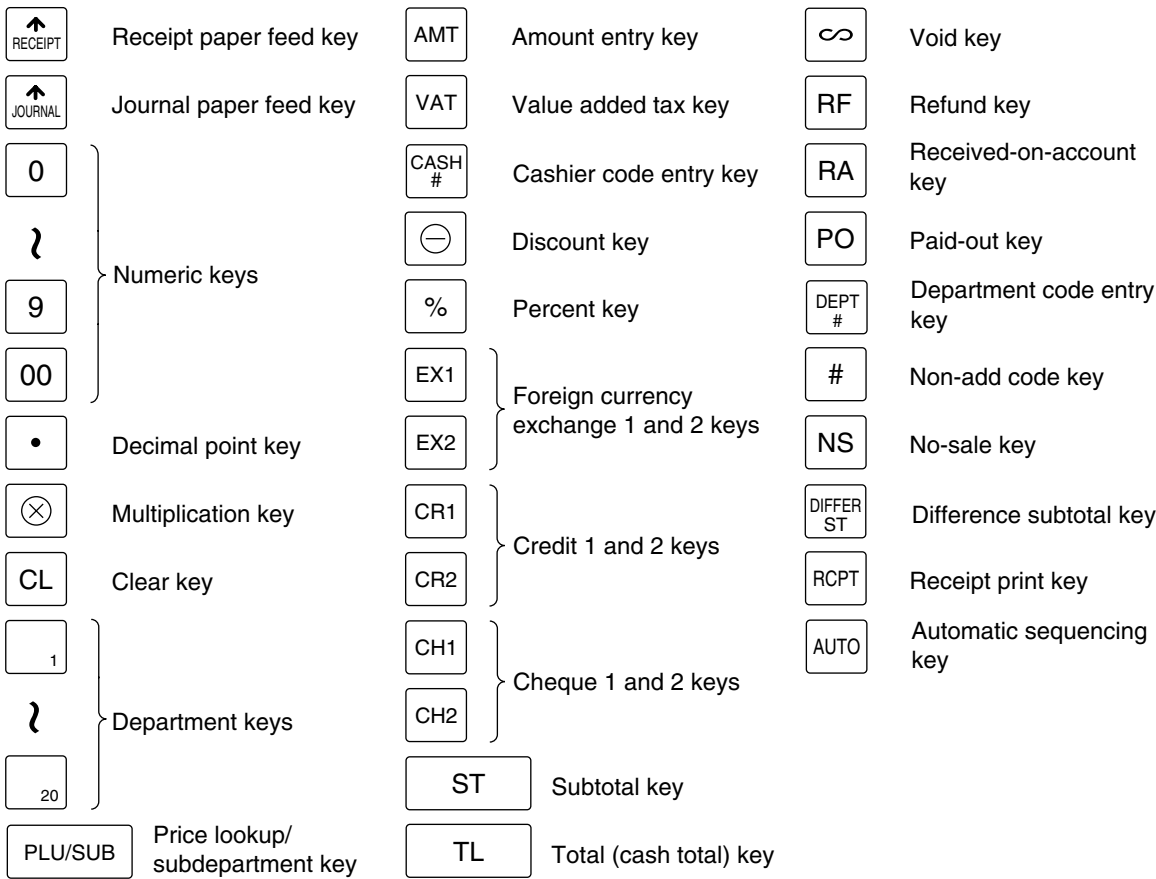
*Do not attempt to remove the paper roll with the head in the down position. This may result in damage to the printer and print head.*

# KEYBOARD

## 1 ER-A410 standard keyboard layout



**Note** All the keys but the receipt paper feed and journal paper feed keys can be re-positioned. If you want to change the layout, consult your dealer.



## Optional keys

SLIP	Slip print key	VAT SHIFT	Value added tax shift key	L1	PLU level shift 1 through 3 keys
%2	Percent 2 through 4 keys	VP	Validation print key	}	
}		CLERK #	Clerk code entry key	L3	
%4		GC COPY	Guest check copy key	PRICE SHIFT	Price level shift key
AUTO 2	Automatic sequencing 2 through 5 keys	PBLU	Previous balance lookup key	⊖2	Discount 2 through 4 keys
}		NBAL	New balance key	}	
AUTO 5		FINAL	Final key	⊖4	
CA2	Cash total 2 key	DEPO (+)	Deposit entry key	CH3	Cheque 3 and 4 keys
CR3	Credit 3 and 4 keys	DEPO (-)	Deposit refund key	CH4	
CR4		GC RCPT	Guest check receipt key	EX3	
RA2	Received-on-account 2 key	CHK PRINT	Check print key	EX4	Foreign currency exchange 3 and 4 keys
PO2	Paid-out 2 key	1/2	Half penny key	000	Triple zero entry key

### Note

The department and direct PLU keys can be extended, if you require extension of the department or direct PLU keys, please contact your dealer.

## 2 ER-A420 standard keyboard layout

↑ RECEIPT	↑ JOURNAL	2	4	6	L3	PRICE SHIFT		7	14	21	28	35	42	49	56	63	70
RCPT	GC COPY	1	3	5	L2	DEPT #		6	13	20	27	34	41	48	55	62	69
CASH #	VAT	⊗	•	CL	L1	CR2		5	12	19	26	33	40	47	54	61	68
#	AUTO	7	8	9	AMT	CR1		4	11	18	25	32	39	46	53	60	67
⊖	%	4	5	6	PLU SUB	CH		3	10	17	24	31	38	45	52	59	66
PO	RA	1	2	3	NS	EX		2	9	16	23	30	37	44	51	58	65
∞	RF	0	00	000	ST	TL		1	8	15	22	29	36	43	50	57	64

**Note** All the keys but the receipt paper feed and journal paper feed keys can be re-positioned. If you want to change the layout, consult your dealer.

↑ RECEIPT	Receipt paper feed key	AMT	Amount entry key	∞	Void key
↑ JOURNAL	Journal paper feed key	VAT	Value added tax key	RF	Refund key
0	Numeric keys	CASH #	Cashier code entry key	RA	Received-on-account key
}		⊖	Discount key	PO	Paid-out key
9		DEPT #	Department code entry key	GC COPY	Guest check copy key
00		%	Percent key	EX	Foreign currency exchange key
000	Decimal point key	L1	PLU level shift 1 through 3 keys	PRICE SHIFT	Price level shift key
•		}		NS	No-sale key
⊗		L3		#	Non-add code key
CL		CR1	Credit 1 and 2 keys	RCPT	Receipt print key
1	Department keys	CR2		AUTO	Automatic sequencing key
}		CH	Cheque key	1	Direct price lookup keys
6		ST	Subtotal key	}	
PLU SUB		TL	Total (cash total) key	70	

Optional keys

SLIP	Slip print key	VAT SHIFT	Value added tax shift key	⊖2	
%2	Percent 2 through 4 keys	DIFFER ST	Difference subtotal key	}	Discount 2 through 4 keys
}		CLERK #	Clerk code entry key	⊖4	
%4		VP	Validation print key	CH2	
AUTO 2	Automatic sequencing 2 through 5 keys	PBLU	Previous balance lookup key	}	Cheque 2 through 4 keys
}		NBAL	New balance key	CH4	
AUTO 5		FINAL	Final key	EX2	
CA2	Cash total 2 key	DEPO (+)	Deposit entry key	}	Foreign currency exchange 2 through 4 keys
CR3	Credit 3 and 4 keys	DEPO (-)	Deposit refund key	EX4	
CR4		GC RCPT	Guest check receipt key		
RA2	Received-on-account 2 key	CHK PRINT	Check print key		
PO2	Paid-out 2 key	1/2	Half penny key		

**Note** The department and direct PLU keys can be extended, if you require extension of the department or direct PLU keys, please contact your dealer.

3 Standard key number layout

These key numbers are used for positioning of department keys and direct PLU keys. Refer to pages 39 and 51. This layout can be changed by your dealer.

For ER-A410

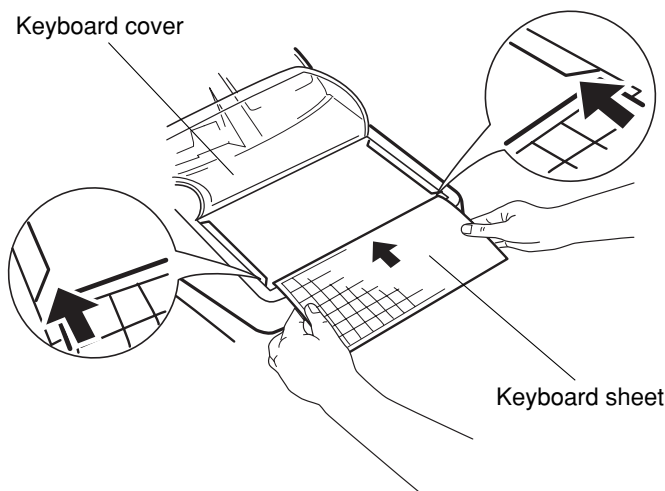
				005	010	015	020		
				004	009	014	019		
				003	008	013	018		
				002	007	012	017		
				001	006	011	016		

## For ER-A420

		002	004	006			027	034	041	048	055	062	069	076	083	090
		001	003	005			026	033	040	047	054	061	068	075	082	089
							025	032	039	046	053	060	067	074	081	088
							024	031	038	045	052	059	066	073	080	087
							023	030	037	044	051	058	065	072	079	086
							022	029	036	043	050	057	064	071	078	085
							021	028	035	042	049	056	063	070	077	084

## 4 Installing the keyboard sheet (ER-A420)

Insert the keyboard sheet between the keyboard cover and the cabinet as illustrated below.



- ① Turn over the keyboard cover.
- ② Insert the keyboard sheet into a slit.



- ③ Close the keyboard cover.

### Note

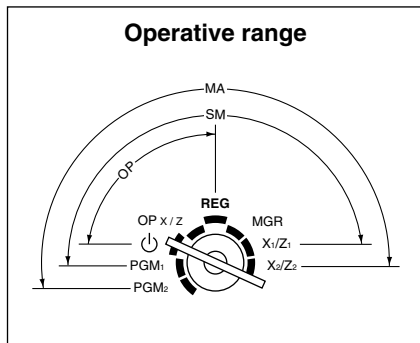
- Do not spread the keyboard cover too far as it might tear the tabs.
- Replace the keyboard sheet with a new one if by chance it gets wet. Use of a wet keyboard sheet may cause problems.
- Be sure to use only SHARP-supplied keyboard sheets. Thick or hard sheets make key operations difficult.
- Place the keyboard sheet evenly under the keyboard cover.
- If you require a new keyboard sheet, please contact your dealer.
- The keyboard cover will eventually wear out. If your keyboard cover is dirty or broken, replace the cover with a new one. For details, contact your authorized SHARP dealer.



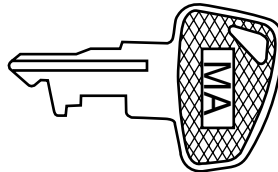
# KEYS AND SWITCHES

## 1 Mode switch and mode keys

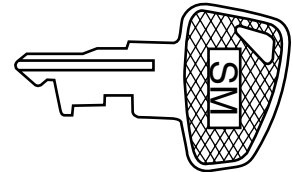
The mode switch can be operated by inserting one of the three supplied mode keys – manager (MA), submanager (SM), and operator (OP) keys. These keys can be inserted or removed only when the switch is in the “REG” or “⏻” position.



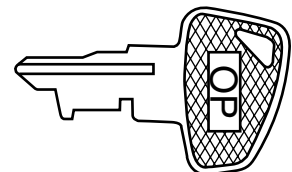
### • Manager key (MA)




### • Submanager key (SM)



### • Operator key (OP)

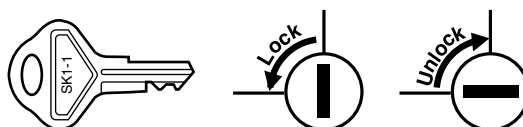


The mode switch has these settings:

- ⏻ :** This mode locks all register operation.  
No change occurs to register data.
- OP X/Z:** This setting allows cashiers/clerks to take X or Z reports for their sales information. It can also be used for displaying the date/time and printing the employee arrival/departure times. And it can be used to toggle receipt state “ON” and “OFF” by pressing the  key. (This setting may be used only when your register has been programmed for “OP X/Z mode available” in the PGM2 mode.)
- REG:** For entering sales
- PGM1:** To program those items that need to be changed often: e.g., unit prices of departments or PLUs, and percentages.
- PGM2:** To program all PGM1 programs and those items that do not require frequent changes: e.g., date, time, or a variety of register functions
- MGR:** For manager’s and submanager’s entries  
The manager can use this mode to make entries that are not permitted to be made by cashiers/clerks – for example, after-transaction voiding and override entries.
- X1/Z1:** To take the X/Z report for various daily totals.
- X2/Z2:** To take the X/Z report for various periodic (weekly or monthly) consolidation of totals.

## 2 Drawer lock key

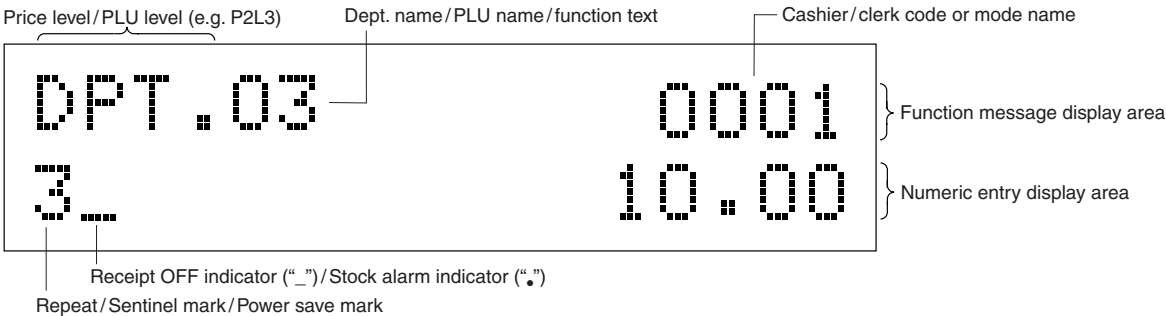
This key locks and unlocks the drawer. To lock it, turn 90 degrees counterclockwise. To unlock it, turn 90 degrees clockwise.



# DISPLAYS


## 1 Operator display

The operator display consists of a 2-line LCD dot-matrix display (16 characters/line).



- **Cashier/clerk code or mode name**  
The mode you are in is displayed. When a cashier/clerk is assigned, the corresponding cashier/clerk code is displayed in the REG or OP X/Z mode. For example, "0001" is displayed when cashier 0001 is assigned.
- **Repeat**  
The number of repeats is displayed, starting at "2" and incremental with each repeat. When you have registered ten times, the display will show "0". (2 → 3 .....9 → 0 → 1 → 2...)
- **Sentinel mark**  
When the amount in the drawer reaches the amount you preprogrammed, the sentinel mark "X" is displayed to advice you to remove the money to a safe place.
- **Power save mark**  
When the cash register goes into the power save mode, the power save mark (decimal point) is displayed.
- **Stock alarm indicator**  
When the stock of the PLU which you entered is zero or negative, the alarm indicator (decimal point) is displayed.
- **Function message display area**  
Item labels of departments and PLU/subdepartments and function texts you use, such as %1, (–) and CASH are displayed here. For the details of function texts, please refer to page 62 and 63.  
When an amount is to be entered or entered, "AMOUNT" is displayed: When an amount is to be entered, ----- is displayed in the numeric entry display area with "AMOUNT". When a preset price has been set, the price is displayed in the numeric entry display area with "AMOUNT".
- **Numeric entry display area**  
Numbers entered using numeric keys are displayed here.

### Date and time display

Date and time appear on the display in the OP X/Z, REG, or MGR mode. In the REG or MGR mode, press the  key to display the date and time.

### Error message

When an error occurs, the corresponding error message is displayed in the function message display area. For the details of error messages, please refer to "Error message table" on page 165.

## 2 Customer display (Pop-up type)



Power save mark (This mark appears only in the power save mode)

# PRIOR TO PROGRAMMING

## 1 Programming keyboard layout

When you are in the PGM1 or PGM2 mode, the keyboard layout will be set to the one for programming as shown below.

### For ER-A410

		(NUM)	(SPACE)	Ø <sup>o</sup>	(DC)		(SHIFT-2)	(SHIFT)	¢ ∞ Æ (BACK SPACE)
↑ RECEIPT	↑ JOURNAL	⊗	•	CL	" A "	" F "	# K	\$ P	% U & X
(~)	(^)	7	8	9	' B	* G	@ L	/ Q	( V ) Y
(~)	(~)	4	5	6	: C	; H	' M	. R	! W ? Z
(~)	(')	1	2	3	+ D	- I	= N	ç S	ST
(°)	(")	0	00		< E	> J	Pt O	£ T	TL

### For ER-A420

⬆ RECEIPT	⬆ JOURNAL	â	à	á	ê	è	é	î	ì	í	ô	ò	ó	Å	Ñ	(BACK SPACE)
Æ <sup>æ</sup>	Ø	û	ù	ú	!	?	#	\$	%	&	'	^	¢	Ç	α	=
Pt	œ	⊗	•	CL	1	2	3	4	5	6	7	8	9	0	[ {	] }
§	£	7	8	9	Q	W	E	R	T	Y	U	I	O	P	@	/ -
(	)	4	5	6	A	S	D	F	G	H	J	K	L	ß	;	*
“	”	1	2	3	Z	X	C	V	B	N	M	Ä	Ö	Ü	,	.
(SHIFT)	(DC)	0	00	000	ST	TL	(SPACE)	(SPACE)	(SPACE)	(SPACE)	(SPACE)	(SPACE)	(SPACE)	(SPACE)	(DC)	(SHIFT)

### Note

- The programming keyboard sheet is transparent, allowing placement over the standard keyboard sheet.
- The shaded area contains the character keys which are used for programming characters.

(DC) : Used to enter the double-size character.

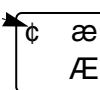
(SHIFT) : Used to change a lower-case letter/upper-case letter.

(SHIFT-2) : Used to select a symbol.

(BACK SPACE) : Used to back up the cursor for deleting.

(SPACE) : Used to enter a space.

(NUM) : Used to enter a numeric character.



## 2 How to program alphanumeric characters

You can program alphanumeric characters for departments, PLUs, functions and so on in the character entry mode.

There are two ways for programming characters: using character keys on the keyboard and entering character codes with numeric keys on the keyboard.

### ■ Using character keys on the keyboard

Enter a character according to the position in the programming keyboard layout.

#### Entering alphanumeric characters

To enter a character, simply press a corresponding character key.

To enter a numeric character, press **(NUM)** key and enter a number by ten keys (0 – 9).

[Ex.] Entering the character “135” : **(NUM)** → 135 → **(NUM)**

To enter a space, press **(SPACE)** key.

#### Entering double-size characters

**(DC)** : This key toggles the double-size character mode and normal-size character mode. The default is the normal-size character mode. The double-size character is displayed with the letter “=” (ex. =S).

[Ex.] To program the name “SHARP” in double size : **(DC)** → SHARP → **(DC)**

#### Entering lowercase letters

**(SHIFT)** : You can enter a lower-case letter by using this key. Press **(SHIFT)** key just before you enter the lower-case letter. This key also allows you to enter the characters/symbols shown at the upper right of keys.

[Ex.] To program the name “Sharp” : → S → **(SHIFT)** → harp → **(SHIFT)**

“( ˇ )”, “( ^ )”, “( ¨ )”, “( ` )”, “( ´ )”, “( ´´ )”, “( ° )”, and “( ~ )” keys are used only in combination with a character key. If the combination is unavailable, only a character key is entered. [Ex.] “Å” : → **(°)** → A

### Editing text

You can edit the text you have entered by deleting characters.

**(BACK SPACE)** : Backs up the cursor for deleting the character or figure at the left of the cursor.

### ■ Entering character codes

Numerals, letters and symbols are programmable by entering the **(00)** key and character codes. See the “Alphanumeric character code table” on the next page. In this way, you can program characters other than the characters shown in the programming keyboard layout.

XXX → **(00)**      XXX: Character code (3 digits)

#### Note

- Double-size characters can be made by entering the character code 253.

[Ex.] To program the name “SHARP” in double size

253	<b>(00)</b>	083	<b>(00)</b>	072	<b>(00)</b>	065	<b>(00)</b>	082	<b>(00)</b>	080	<b>(00)</b>
(DC)		S		H		A		R		P	

# Alphanumeric character code table

Code	Character	Code	Character	Code	Character	Code	Character	Code	Character
001	á	046	.	091	Ä	136	→	193	ı
002	â	047	/	092	Ö	137	∞	194	Ġ
003	ê	048	0	093	Ü	138	∞	195	Ş
004	î	049	1	094	^	139	◀	196	Ğ
005	ì	050	2	095	_	140	▶	197	ğ
006	í	051	3	096	'	141	F	198	Ɔ
007	ô	052	4	097	a	142	T	199	Ɔ
008	ó	053	5	098	b	143	↓	200	Ł
009	û	054	6	099	c	144	ç	201	Ј
010	ú	055	7	100	d	145	°	202	Ž
011	œ	056	8	101	e	146	¿	203	Đ
012	ŭ	057	9	102	f	147	Û	204	đ
013	ŭ	058	:	103	g	148	à	205	Ć
014	ŕ	059	;	104	h	149	Æ	206	ć
015	ó	060	<	105	i	150	ø	207	€
016	Λ	061	=	106	j	151	Å	208	₤
017	Ψ	062	>	107	k	152	⊠	209	˘
018	Γ	063	?	108	l	153	é	210	ě
019	ˆ	064	@	109	m	154	è	211	š
020	Ω	065	A	110	n	155	Pt	212	č
021	Δ	066	B	111	o	156	i	213	ž
022	Θ	067	C	112	p	157	Ñ	214	ý
023	Ξ	068	D	113	q	158	ò	215	ù
024	Π	069	E	114	r	159	£	216	ñ
025	Σ	070	F	115	s	160	¥	217	˘
026	Υ	071	G	116	t	161	°	218	˘
027	Φ	072	H	117	u	162	Γ	219	ř
028	Ú	073	I	118	v	163	J	224	*
029	Ú	074	J	119	w	164	˘	225	§
030	Ö	075	K	120	x	165	.	226	Ø
031	Ó	076	L	121	y	177	Á	227	ˆ
032	(space)	077	M	122	z	178	Í	228	↑
033	!	078	N	123	{	180	Ā	229	]
034	"	079	O	124		181	ā	230	[
035	#	080	P	125	}	182	Ē	231	"
036	\$	081	Q	126	β	183	ē	232	ä
037	%	082	R	127	¢	184	ī	233	ö
038	&	083	S	128	!!	185	ī	234	ü
039	'	084	T	129	₁	186	ū	235	æ
040	(	085	U	130	₂	187	ū	236	â
041	)	086	V	131	₃	188	Ŋ	237	É
042	*	087	W	132	₄	189	ŋ	238	ñ
043	+	088	X	133	1/2	190	Č	253	*(DC)
044	,	089	Y	134	F/T	191	Š		
045	-	090	Z	135	←	192	Ç		

\*(DC) : Double-size character code

: The shaded character cannot be displayed (displayed as space).

**Note** The character "!!" (code: 128) cannot be displayed (displayed as "!").

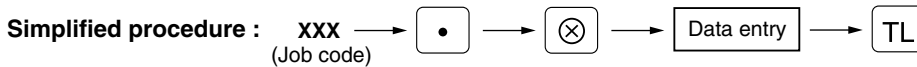
# PROGRAMMING

This chapter illustrates how to program your cash register.

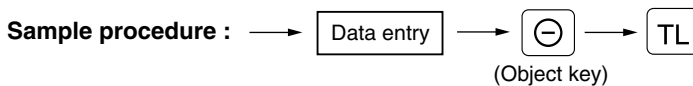
## ■ Basic instructions

All the programming items can be programmed by the **Job-Code-Based Programming** described later. However, your machine allows you to program some items using the **Direct Programming**, which does not require you to enter the job code.

## Job-Code-Based Programming



## Direct Programming



## ■ Preparations for programming

1. Plug your machine into a standard wall outlet.
2. Turn the mode switch to the PGM1 or PGM2 position.  
To set the mode switch to the PGM1 position, use the manager or submanager key; and to set it to the PGM2 position, use the manager key.
3. Check to see whether both journal and receipt rolls are present in the machine. If they are missing, install journal and receipt paper rolls correctly referring to the procedure in "4. Installing and removing the paper roll" under "OPERATOR MAINTENANCE".
4. Program necessary items into your machine.

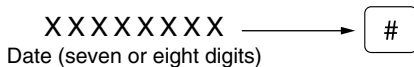
## Direct Programming

## 1 Setting the date and time

■ **Date** **PGM 2**

Enter the day (one or two digits), month (two digits), and year (four digits : 2000 – 2099) in this sequence.

## Procedure



### Example

Key operation	Print
26082003 <input type="text" value="#"/>	26/08/2003 0:00 000000#0001  *PGM2*  26/08/2003

■ Time PGM 2

For setting the time, enter the time in 4 digits using the 24-hour format. For example, when the time is set to 2:30 AM, enter 230; and when it is set to 2:30 PM, enter 1430.

Procedure

X X X X → #  
Time (max. four digits)

Example

Key operation	Print
1430 #	<div>26/08/2003 14:30 000000#0002  *PGM2*  14:30</div>

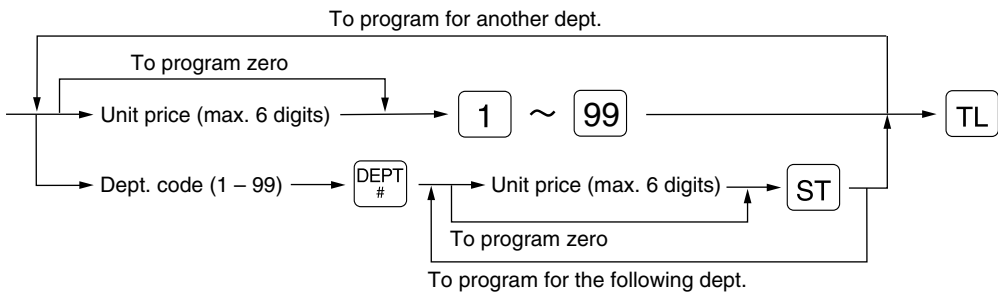
**Note** • For display and print, 24-hour format is applied by default. To change it to 12-hour format, contact your dealer.

2 Programming for departments

Your machine is equipped with 20 (ER-A410)/6 (ER-A420) standard departments and up to 99 optional departments. Your machine allows you to perform the following programming for each department.

■ Unit price PGM 1 PGM 2

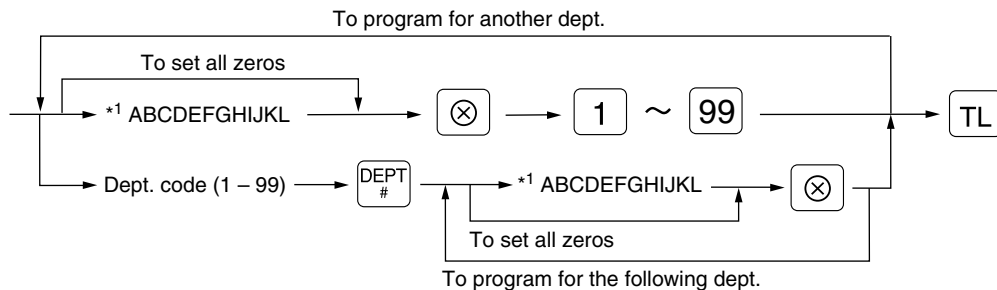
Procedure



Example

Key operation	Print
1000 1 TL	<div>*PGM2*  D01 10.00 DPT. 01 G01 003 COL18</div>

## Procedure



*1 Item:	Selection:	Entry:
A	VAT4 or TAX4	Assign "non-taxable"
		0
B	VAT3 or TAX3	Assign "non-taxable"
		0
C	VAT2 or TAX2	Assign "non-taxable"
		0
D	VAT1 or TAX1	Assign "non-taxable"
		0
E	Item validation printing	Non-compulsory
		0
F	Registration type	Compulsory
		1
G	Type of unit price entry	Normal
		0
H	Significant digit for HALO	SICS (Single Item Cash Sale)
		1
I	Number of zeros to follow the significant digit for HALO	SIF (Single Item Finalization)
		2
J	Commission group number	Inhibit department key
		0
KL	Group number	Open only
		1
		Preset only
		2
		Open and preset
		3
H	Significant digit for HALO	0 through 9
I	Number of zeros to follow the significant digit for HALO	0 through 8
J	Commission group number	0 through 9
KL	Group number	Group 01 – 09 ((+) dept.)
		01 through 09
		Group 10 ((-) dept.)
		10
		Group 11 ((+) hash dept.)
		11
		Group 12 ((-) hash dept.)
		12
		Group 13 ((+) bottle return dept.)
		13
		Group 14 ((-) bottle return dept.)
		14

## Tax status

Assign a tax status to each department.

### Note

- The tax system of your machine has been factory-set to automatic VAT1 – 4. If you desire to select any of automatic tax1 – 4, manual VAT1 – 4, manual VAT1, manual tax1 – 4, and the combination of automatic VAT1 and the automatic tax2 – 4, consult your dealer.
- When the combination of automatic VAT1 and automatic tax2 – 4 system is selected, one of the TAX2 (C), TAX3 (B) and TAX4 (A) can be selected in combination with VAT1 (D).  
Example: ABCD = 1001, 0011, 0101

## Compulsory item validation printing

If item entries must be validated, program corresponding departments for compulsory item validation printing.



- **Registration type (SICS/SIF/Normal type)**

SICS: If the first registration is to a department set for SICS, the sale is finalized as soon as the department key is pressed. If the sale is preceded by registrations to departments not set for SICS, a sale to a department set for SICS does not finalize and can be repeated until the **TL** key is pressed.

SIF: Whenever a sale is made to a department set for SIF, the sale is finalized as soon as the department key is pressed.

- **Type of unit price entry (open and preset/preset only/open only/inhibit department key)**

You may select one of four types of unit price entry for each department.

- **HALO (High Amount Lockout)**

You can set upper limit amounts for each department. The limit is effective for operations in the REG mode and can be overridden in the MGR mode. HALO limit is represented by two figures as follows. Programmed item (H and I) is the same as  $H \times 10^I$ .

- **Commission group number**

A commission group number (0 - 9, 0: non commission) can be assigned to each department.

- **Group number**

You can assign departments to a maximum of 14 groups (1 through 14, 0: non group).

### Example

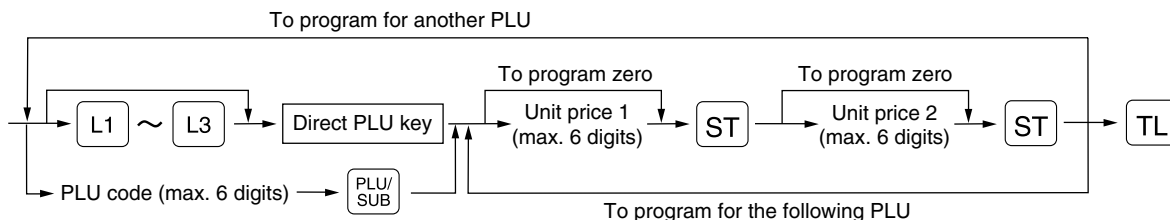
Key operation	Print						
000000317001 <b>⊗</b> <b>1</b> <b>TL</b>	<div> <p><b>*PGM2*</b></p> <table> <tr> <td><b>D01</b></td><td><b>10.00</b></td></tr> <tr> <td><b>DPT. 01</b></td><td><b>G01</b></td></tr> <tr> <td><b>003</b></td><td><b>COL17</b></td></tr> </table> </div>	<b>D01</b>	<b>10.00</b>	<b>DPT. 01</b>	<b>G01</b>	<b>003</b>	<b>COL17</b>
<b>D01</b>	<b>10.00</b>						
<b>DPT. 01</b>	<b>G01</b>						
<b>003</b>	<b>COL17</b>						

## 3 Price lookup (PLU) programming

Your machine is equipped with 500 standard PLUs. Your machine allows you to perform the following programming for each PLU.

### Unit price PGM 1 PGM 2

#### Procedure



## Example

### Key operation

1 PLU/  
SUB 1000 ST  
ST  
TL

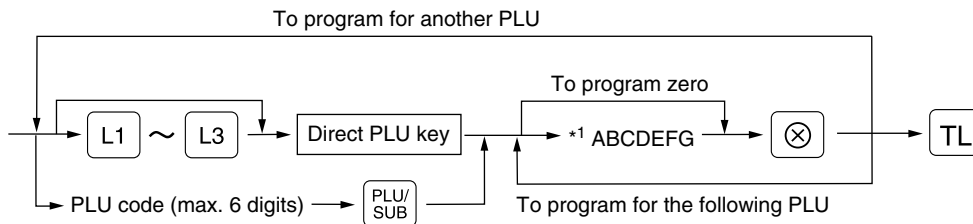
### Print

```
*PGM2*

P000001 (O1)      /00
                   10.00
                   0.00
PL000001           CO
2                 S  0.00
```

## Functional selection PGM 2

### Procedure



*1 Item:	Selection:	Entry:
<b>A</b> Sign (+/-)	Set as a plus PLU	0
	Set as a minus PLU	1
<b>B</b> VAT4 or TAX4	Assign "non-taxable"	0
	Assign "VAT4 or TAX4"	1
<b>C</b> VAT3 or TAX3	Assign "non-taxable"	0
	Assign "VAT3 or TAX3"	1
<b>D</b> VAT2 or TAX2	Assign "non-taxable"	0
	Assign "VAT2 or TAX2"	1
<b>E</b> VAT1 or TAX1	Assign "non-taxable"	0
	Assign "VAT1 or TAX1"	1
<b>F</b> Type of unit price entry	Inhibit PLU/subdepartment	0
	Open only	1
	Preset only	2
	Open and preset	3
<b>G</b> Commission group number		0 through 9

### • Sign (+/-)

The function of every PLU/subdepartment varies according to the combination of its sign and the sign of its associated department as follows:

Department	Sign	Function of PLU/subdepartment
	PLU/subdepartment	
+	+	Serves as a normal plus PLU/subdepartment
-	-	Serves as a normal minus PLU/subdepartment
+	-	Accepts store coupon entries, but not split-pricing entries
-	+	Not valid; not accepted

• **Tax status**

Assign a tax status to each PLU/subdepartment.

**Note**

- The tax system of your machine has been factory-set to automatic VAT1 – 4. If you desire to select any of automatic tax1 – 4, manual VAT1 – 4, manual tax1 – 4, and the combination of automatic VAT1 and the automatic tax2 – 4, consult your dealer.
- When the combination of automatic VAT1 and automatic tax2 – 4 system is selected, one of the TAX2 (D), TAX3 (C) and TAX4 (B) can be selected in combination with VAT1 (E).  
Example: BCDE= 1001, 0011, 0101
- A PLU not programmed for any of these tax statuses is registered depending on the tax status of the department which the PLU belongs to.

• **Type of unit price entry (open and preset/preset only/open only/inhibit PLU/subdepartment)**

You may select one of four types of unit price entry for each PLU/subdepartment.

Inhibit PLU/subdepartment: inhibit the entry of any assigned PLU/subdepartment code. This mode does not clear the PLU/subdepartment program data.

• **Commission group number**

A commission group number (0 – 9, 0: non commission) can be assigned to each PLU/subdepartment.

**Example**

Key operation

1 PLU/SUB 0000120 ⊗  
TL

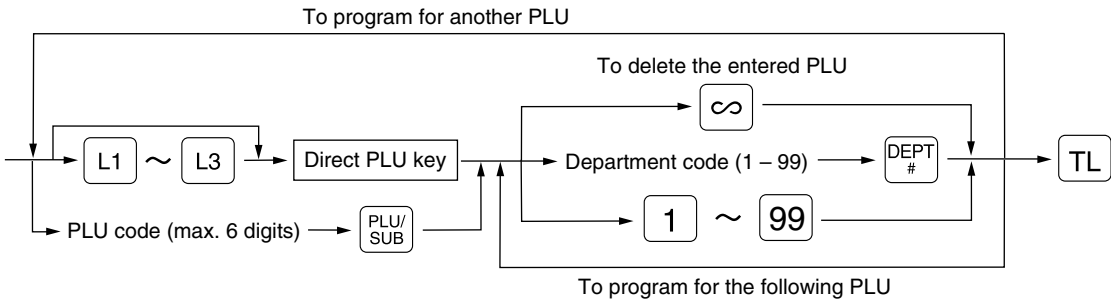
Print

\*PGM2\*

P000001 (O1) /00  
T1 10.00  
0.00  
PL000001 CO  
2 \$ 0.000

■ **PLU assignment to department** PGM 1 PGM 2

**Procedure**



**Example**

Key operation

1 PLU/SUB 1  
TL

Print

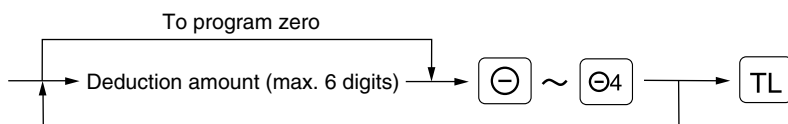
\*PGM2\*

P000001 (O1) /00  
T1 10.00  
0.00  
PL000001 CO  
2 \$ 0.000

## 4 Programming for discount keys (⊖)

### ■ Deduction amount PGM 1 PGM 2

#### Procedure



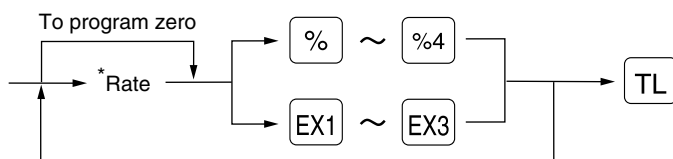
#### Example

Key operation	Print
1000 ⊖ TL	<div style="border: 1px solid black; padding: 10px;"> <p><b>*PGM2*</b></p> <p><b>F001 (→) 1</b></p> <p><b>S</b> -10.00 L18</p> </div>

## 5 Programming for percent and exchange keys (%) and (EX)

### ■ Percent rate and currency exchange rate PGM 1 PGM 2

#### Procedure



\* Rate: Percent rate: 0.00 - 100.00  
Currency exchange rate: 0.000000 - 999.999999

**Note** You must use the decimal point key when setting rates that are fractional.

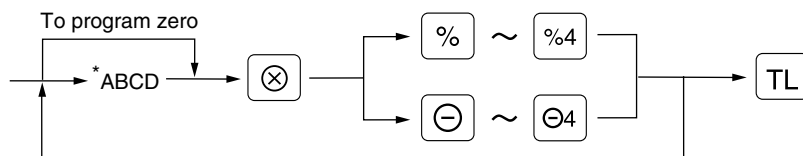
#### Example

Key operation	Print
10 • 25 % TL	<div style="border: 1px solid black; padding: 10px;"> <p><b>*PGM2*</b></p> <p><b>F005 %1</b></p> <p><b>S</b> -10.25% L100.00%</p> </div>

## 6 Programming for discount and percent keys (⊖ and %)

### High amount lockout (HALO), item/subtotal selection, and +/- sign PGM 2

#### Procedure



* Item:	Selection:	Entry:
<b>A</b> Sign (+/-)	Plus	0
	Minus	1
<b>B</b> Item/subtotal selection	Subtotal (-)/%	0
	Item (-)/%	1
<b>C</b> Significant digit for HALO (for ⊖)		0 through 9
<b>D</b> Number of zeros to follow the significant digit for HALO (for ⊖)		0 through 8

#### Note

#### HALO (High amount lockout)

CD is the same as  $C \times 10^D$ .

For example, presetting 14 (100.00) here means that amount entries of up to 100.00 are allowed in the REG mode. When you preset 18, however, the upper limit amount is 999999.99.

#### Example

##### Key operation

1013 ⊗ ⊖  
TL

##### Print

```

*PGM2*

F001 (-) 1
S          -10.00
          L13
  
```

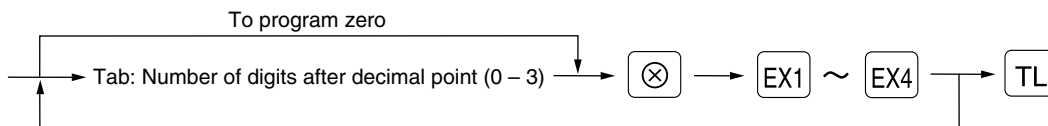
## 7 Programming for exchange keys (EX)

### ■ Tab of foreign currency PGM 2

#### Note

When you introduce EURO on your register, this setting for the EX1 is automatically programmed by execution of Job #800 in the X2/Z2 mode.

#### Procedure



#### Example

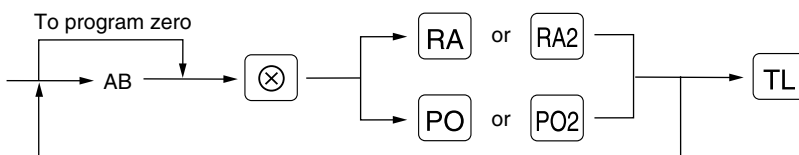
Key operation	Print
2 [X] [EX1] [TL]	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p><b>*PGM2*</b></p> <p><b>F062 EXCH1</b></p> <p>2 0.000000</p> </div>

## 8 Programming for the RA and PO keys

### ■ High amount lockout (HALO) PGM 2

The HALO limit is in effect for the REG mode operations but can be overridden in the MGR mode. The HALO limit is represented by two figures as follows:

#### Procedure



AB is the same as  $A \times 10^B$ .

A: Significant digit (0 through 9)

B: Number of zeros to follow significant digit (0 through 9)

For example, presetting 13 (10.00) here means that amount entries of up to 10.00 are allowed in the REG mode. When you preset 19, however, the upper limit amount is 9999999.99.

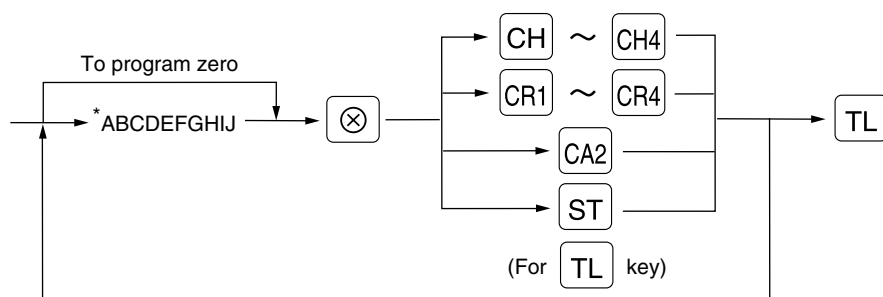
#### Example

Key operation	Print
13 [X] [RA] [TL]	<div style="border: 1px solid black; padding: 10px; text-align: center;"> <p><b>*PGM2*</b></p> <p><b>F045 ***RA</b></p> <p>L13</p> </div>

## 9 Programming for the CH, CR, CA2, and TL keys

### High amount lockout (HALO) and functional selection PGM 2

#### Procedure



* Item:	Selection:	Entry:
<b>A</b> EFT transaction	Select non-compulsory (fixed for the TL and CA2 keys)	0
	Select compulsory	1
<b>B</b> Slip printing	Select non-compulsory	0
	Select compulsory	1
<b>C</b> Footer printing on receipt	Select footer printing on selected media No	0
	Select footer printing on selected media Yes	1
<b>D</b> Non-add code entry	Select non-compulsory	0
	Select compulsory	1
<b>E</b> Change enable (Over-tender enable)	Select change enable	0
	Select change disable	1
<b>F</b> Validation printing	Select optional validation	0
	Select compulsory validation	1
<b>G</b> Drawer opening	Have the drawer open	0
	Have the drawer remain closed	1
<b>H</b> Compulsory amount tendered	Inhibit amount tendered for CR1 to CR4	0
	Select optional amount tendered for TL, CA2, or CH to CH4	0
	Select compulsory amount tendered	1
<b>I</b> Significant digit		0 through 9
<b>J</b> Number of zeros to follow significant digit		0 through 8

#### Note

Item IJ is the same as  $I \times 10^J$ . For example, presetting 13 (10.00) here means that amount entries of up to 10.00 are allowed in the REG mode. When you preset 18, however, the upper limit amount is 999999.99.

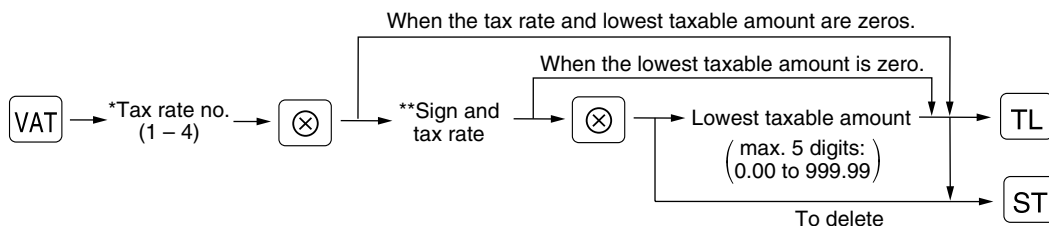
#### Example

Key operation	Print
0000000115 ⊗ CR3 TL	<div> <p><b>*PGM2*</b></p> <p><b>F060 CREDIT3 L15</b></p> <p>00000001</p> </div>

## 10 Programming the tax rate

### Tax rate PGM 2

#### Procedure



\*Tax rate no.: Enter a corresponding tax rate number. For example, when you program a tax rate as tax rate 1, enter "1", and when you program it as tax rate 4, enter "4".

\*\*Sign and tax rate: YYYY.YYYY

└ Tax rate = 0.0001 to 100.0000

└ Sign (+/-) = 0/1

#### Note

- The lowest taxable amount is valid only when you select add on tax system. If you select VAT (Value added tax) system, it is ignored.
- If you make an incorrect entry before pressing the second  $\otimes$  key in programming a tax rate, cancel it with the  $\square$ CL key; and if you make an error after pressing the second  $\otimes$  key, cancel it with the  $\square$ ST key. Then program again from the beginning.
- If you select VAT system, the sign which you program is ignored.

#### Example

##### Key operation

VAT 2  $\otimes$   
4  $\otimes$   
12 TL

##### Print

```

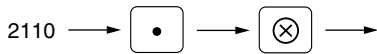
*PGM2*
TAX2          4.0000%
                0.12
  
```



# Job-Code-Based Programming

This section illustrates how to program items using job codes. Using job codes allows you to program a wide variety of items in comparison with direct programming.

Start this programming by entering a corresponding job code as shown below.



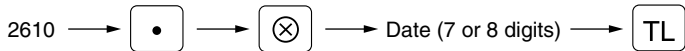
All the items which can be programmed by the job-code-based programming are listed on this page and the following, and those which can also be programmed by the direct programming are marked with the symbol “ **Direct** ” that follows job codes.

## 1 Setting the date and time

### ■ Setting the date PGM 2 2610 Direct

Enter day (one or two digits), month (two digits), and year (four digits) in this sequence.

#### Procedure



#### Example

##### Key operation

2610 [•] [⊗]  
26082003 [TL]

##### Print

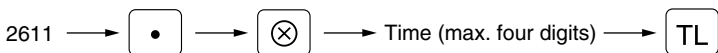
Date

26/08/2003 0:00  
000000#0001  
  
#2610 \*PGM2\*  
  
26/08/2003

### ■ Setting the time PGM 2 2611 Direct

Set the time using the 24-hour format. For example, when the time is set to 2:30 AM, enter 230; and when it is set to 2:30 PM, enter 1430.

#### Procedure



Example

Key operation

Print

2611 [.] [⊗]  
1430 [TL]

26/08/2003 14:30  
000000#0002  
  
#2611 \*PGM2\*  
  
14:30

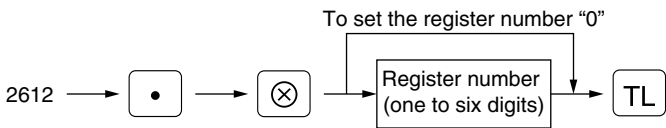
Time

2 Setting the register and consecutive numbers

Setting the register number PGM 2 2612

When your store has two or more registers, it is practical to set separate register numbers for their identification. You may set them in a maximum of six digits.

Procedure



Example

Key operation

Print

2612 [.] [⊗]  
123456 [TL]

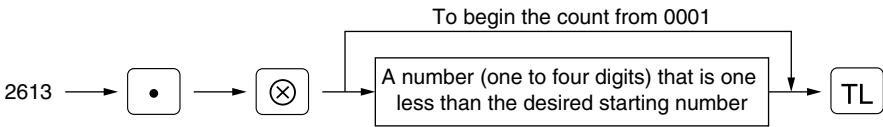
26/08/2003 14:31  
123456#0003  
  
#2612 \*PGM2\*  
  
123456

Register number

Setting the consecutive number PGM 2 2613

The consecutive number is increased by one each time a receipt is issued. Enter a number (one to four digits) that is one less than the desired starting number.

Procedure



## Example

### Key operation

2613     
1000

### Print

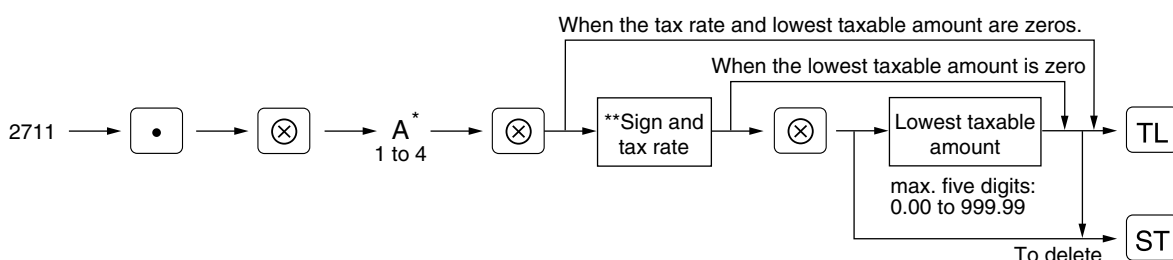
26/08/2003 14:32  
123456#1000  
#2613 \*PGM2\*  
1000

Consecutive number

## 3 Programming the tax rate

**Tax rate** PGM 2 **2711** Direct

### Procedure



\*A: Enter a corresponding tax rate number. For example, when you program a tax rate as tax rate 1, enter 1 and when you program it as tax rate 4, enter 4.

\*\* Sign and tax rate: YYYY.YYYY

Tax rate= 0.0001 to 100.0000

Sign +/- = 1/0

## Example

### Key operation

2711     
2   
4   
12

### Print

#2711 \*PGM2\*  
TAX2 4.0000%  
0.12

Tax rate : 4%  
Lowest taxable amount

Tax rate 2

### Note

- The lowest taxable amount is valid only when you select add on tax system. If you select VAT (Value added system), it is ignored.
- If you make an incorrect entry before pressing the third  key in programming a tax rate, cancel it with the  key; and if you make an error after pressing the third  key, cancel it with the  key. Then program again from the beginning correctly.
- If you select VAT system, the sign which you program is ignored.

## 4 Programming for departments

Your machine is equipped with 20 (ER-A410)/6 (ER-A420) standard departments and up to 99 optional departments. Your machine allows you to perform the following programming for each department.

### ■ Functional programming PGM 2 2110 Direct

You can set each department for:

- **Compulsory item validation printing**

If item entries must be validated, program corresponding departments for compulsory item validation printing.

- **Registration type (SICS/SIF/Normal type)**

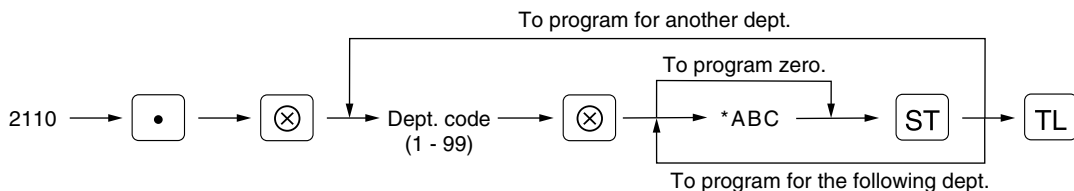
SICS: If the first registration is to a department set for SICS, the sale is finalized as soon as the department key is pressed. If the sale is preceded by registrations to departments not set for SICS, a sale to a department set for SICS does not finalize and can be repeated until the TL key is pressed.

SIF: Whenever a sale is made to a department set for SIF, the sale is finalized as soon as the department key is pressed.

- **Type of unit price entry (open and preset/preset only/open only/inhibit department key)**

You may select one of four types of unit price entry for each department.

#### Procedure



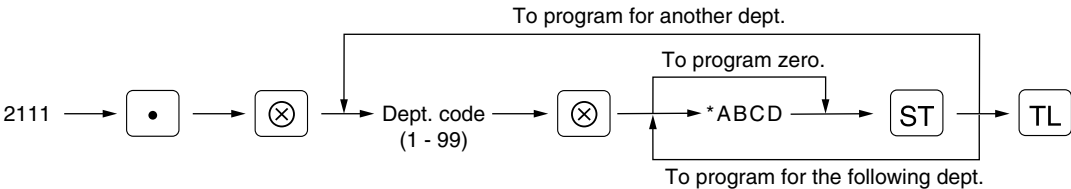
* Item:	Selection:	Entry:
<b>A</b> Item validation printing	Non-compulsory	0
	Compulsory	1
<b>B</b> Registration type	Normal	0
	SICS (Single Item Cash Sale)	1
	SIF (Single Item Finalization)	2
<b>C</b> Type of unit price entry	Inhibit department key	0
	Open only	1
	Preset only	2
	Open and preset	3

#### Example

Key operation	Print
2110 <span>•</span> <span>⊗</span> 3 <span>⊗</span> 003 <span>ST</span> <span>TL</span>	<div> #2110 *PGM2* </div> <div> D03 0.00  DPT. 03 G01  003 COL18 </div>

Assign a tax status to each department. When entries are made into taxable departments in a transaction, tax is automatically computed according to the associated tax rate as soon as the transaction is completed.

Procedure



* Item:	Selection:	Entry:
A	VAT4 or TAX4	Assign "non-taxable"
		0
B	VAT3 or TAX3	Assign "non-taxable"
		0
C	VAT2 or TAX2	Assign "non-taxable"
		0
D	VAT1 or TAX1	Assign "non-taxable"
		0
		Assign "VAT4 or TAX4"
		1
		Assign "VAT3 or TAX3"
		1
		Assign "VAT2 or TAX2"
		1
		Assign "VAT1 or TAX1"
		1

- Note
- The tax system of your machine has been factory-set to automatic VAT1 – 4. If you desire to select any of automatic tax1 – 4, manual VAT1 – 4, manual VAT1, manual tax1 – 4, and the combination of automatic VAT1 and the automatic tax2 – 4, consult your dealer.
  - When the combination of automatic VAT1 and automatic tax2 – 4 system is selected, one of the TAX2 (C), TAX3 (B) and TAX4 (A) can be selected in combination with VAT1 (D).  
Example: ABCD = 1001, 0011, 0101

Example

Key operation

2111 • ⊗  
4 ⊗ 0110 ST  
2 ⊗ 0101 ST  
TL

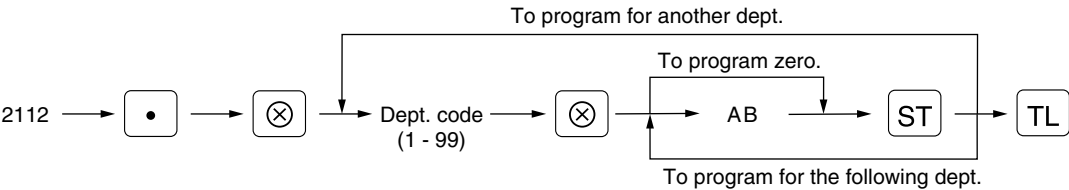
Print

#2111 \*PGM2\*  
  
D04 T 23 0.00  
DPT. 04 G01  
001 COL18  
D02 T1 3 0.00  
DPT. 02 G01  
001 COL18

■ **A limit amount (HALO) of entry** PGM 2 2112 Direct

You can set amounts (HALO: High Amount Lockout) for each department. The limit is effective for the REG mode operations and can be overridden in the MGR mode. HALO limit is represented by two figures as follows:

**Procedure**



AB is the same as  $A \times 10^B$ .  
A: Significant digit (0 through 9)  
B: Number of zeros to follow significant digit (0 through 8)  
For example, presetting 13 (10.00) here means that amount entries of up to 10.00 are allowed in the REG mode. When you preset 18, however, the upper limit amount is 999999.99.

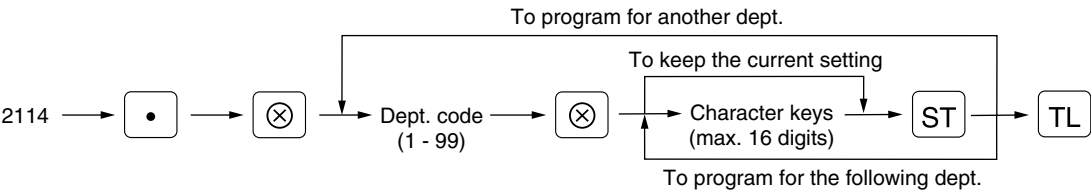
**Example**

Key operation	Print
2112 <span>•</span> <span>⊗</span> 1 <span>⊗</span> 95 <span>ST</span> <span>TL</span>	<div>#2112 *PGM2*</div> <div>D010.00 DPT. 01G01 001COL95</div>

■ **Alphanumeric characters** PGM 2 2114

You can program a maximum of 16 characters (item label) for each department. Select the characters you want to program, referring to section “2 How to program alphanumeric characters” in chapter “PRIOR TO PROGRAMMING”.

**Procedure**



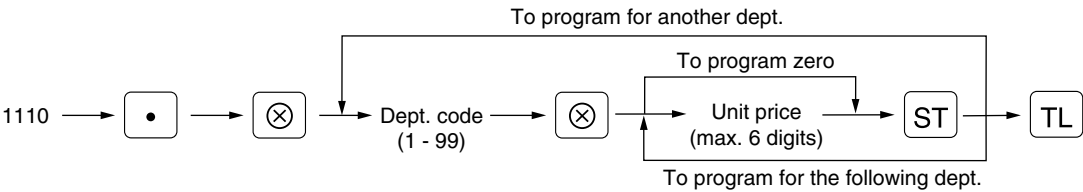
**Example**

Key operation	Print
2114 <span>•</span> <span>⊗</span> 1 <span>⊗</span> FRUITS <span>ST</span> <span>TL</span>	<div>#2114 *PGM2*</div> <div>D010.00 FRUITSG01 001COL95</div>

■ **Unit price**    **PGM 1**    **PGM 2**    **1110**    **Direct**

You can program unit prices up to a maximum of six digits (9999.99). Even if a department is not programmed to allow the entry of preset unit prices in functional programming (job #2110), the department is automatically changed to allow the entry of preset unit prices by this programming entry.

**Procedure**



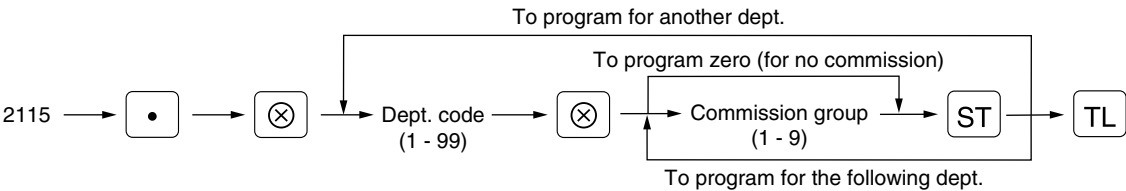
**Example**

Key operation	Print
1110 • ⊗ 1 ⊗ 1000 ST TL	#1110 *PGM2*  D01 10.00 FRUITS G01 003 COL95

■ **Commission group assignment**    **PGM 2**    **2115**    **Direct**

Your machine allows you to assign a commission group (1 – 9) to each department.

**Procedure**



**Example**

Key operation	Print
2115 • ⊗ 1 ⊗ 1 ST 5 ⊗ 2 ST TL	#2115 *PGM2*  D01 10.00 FRUITS G01 003 C1L95 D05 0.00 DPT. 05 G01 001 C2L18

■ **Group number**

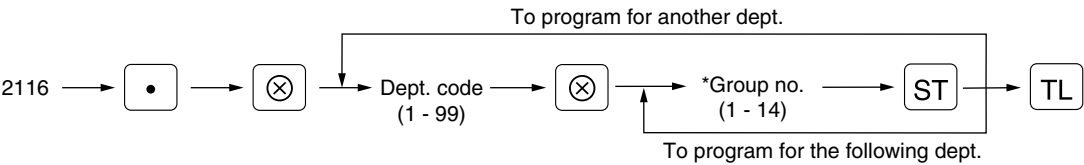
PGM 2

2116

Direct

You can assign departments to a maximum of 14 groups (1 through 14).  
This programming enables you to take group department sales reports.

Procedure



* Group number:	Dept. (+)	1 through 9 (groups 1 through 9)
	Dept. (-)	10
	Hash (+) dept.	11
	Hash (-) dept.	12
	Bottle return (+) dept.	13
	Bottle return (-) dept.	14

Note

The standard model provides no hash dept./bottle return dept.  
If you need them, please consult your dealer.

Example

Key operation

Print

2116 . ⊗  
1 ⊗ 1 ST  
2 ST  
TL

#2116 \*PGM2\*

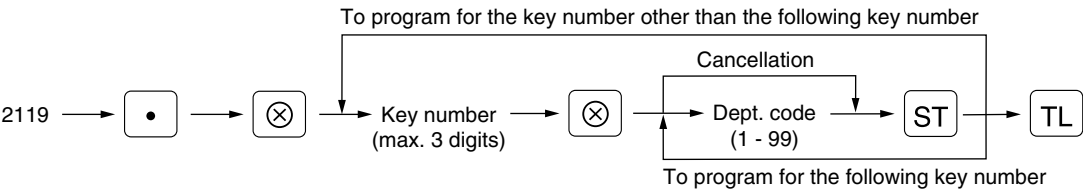
D0110.00  
FRUITSG01  
003C1L95  
D02T1 30.00  
DPT.02G02  
001COL18



**Department key positioning**
PGM 2
2119

You can assign a department number to each key position. Each key position has a corresponding key number. Departments may be freely selected for the number of department keys and their positions. To assign the department to a key position, select the key number of the position. For key number position, refer to section “3 Standard key number layout” in chapter “KEYBOARD”.

**Procedure**



**Note** The key number placement is determined by your local authorized SHARP dealer.


**Example**

Key operation	Print
2119 <span>•</span> <span>⊗</span> 1 <span>⊗</span> 1 <span>ST</span> 2 <span>ST</span> <span>TL</span>	<div style="border: 1px solid black; padding: 10px; display: inline-block;">             #2119 *PGM2*                001 L1      D01              002 L1      D02           </div> <div style="display: inline-block; vertical-align: middle; margin-left: 10px;">             Key no.              Dept. code           </div>

## 5 Price lookup (PLU) programming

Your machine has two kinds of PLU registration methods.

**Direct PLU registration:** Accomplished by pressing item key (direct PLU key) directly.

**Indirect PLU registration:** Accomplished by making an entry of PLU code and pressing the  key.

Each PLU requires you to program the following:

### PLU code (six digits)

#### Associated department

When a PLU is associated with a department, the following functions of the PLU depend on the programming for the corresponding department.

- Grouping (Group 1 through 14)
- Single item cash sale/Single item finalization
- HALO (only for subdepartments)
- Item validation print compulsory/non-compulsory

#### Unit price (max. six digits)




You will usually have unit prices programmed for individual PLUs as PLU unit prices.

If you program unit price "0" for a PLU, you can enter only the selling quantity into the PLU, i.e. the PLU can be used only as a counter.

#### Base quantity for split-pricing entries – two digits

Program a base quantity for each PLU/subdepartment dedicated to split-pricing entries.

#### Type of unit price entry

- If the PLU mode (preset only) is selected, individual PLU entries can be made by entering the assigned code and pressing the  key (or by pressing a direct PLU key without any PLU code entry).
- If the subdepartment mode (open only) is selected, the  key must be depressed after the price entry followed by the PLU code and the  entry (, or the unit price must be entered before pressing a direct PLU key).
- If the PLU/subdepartment mode (open and preset) is selected, the entries in both the PLU and subdepartment modes are available.
- If the delete mode is selected, the corresponding program data for each PLU is deleted.
- If "Inhibit PLU/subdepartment" is selected, the PLU code cannot be entered. This mode does not clear the PLU/subdepartment program data.

#### Sign (+/-)

The function of every PLU/subdepartment varies according to the combination of its sign and its associate department's sign as follows:

Sign		Function of PLU/subdepartment
Dept.	PLU/subdept.	
+	+	Serves as a normal plus PLU/subdept.
–	–	Serves as a normal minus PLU/subdept.
+	–	Accepts store coupon entries, but not split-pricing entries.
–	+	Not valid; not accepted.

#### Tax status

#### Item label (max. 16 characters)

#### Commission group (1 to 9)

#### Set PLU

You can link a maximum of 5 PLUs to a particular PLU.

#### Link PLU

PLU is able to link to any other PLU (e.g. bottle deposit). However, the number of links is a maximum of 5. Even if more than 5 PLUs are linked, the six or higher link is not actualized.

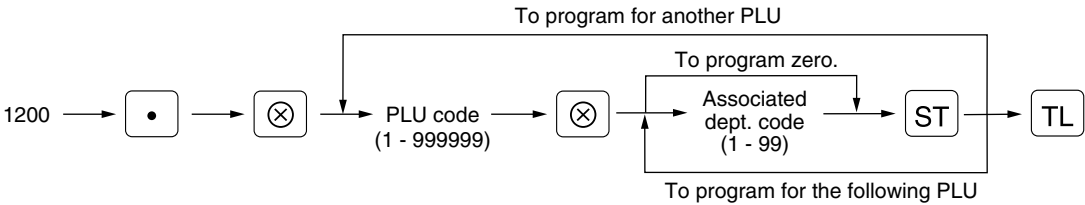
PLU level assignment and direct PLU key positioning  
Stock quantity

**Note** For some items, you can program in two ways: programming an individual PLU code and for a range of sequential PLU codes. The procedure marked “For each PLU” shows individual PLU programming. “For a range of PLUs” shows sequential range PLU programming.

Department assignment PGM 1 PGM 2 1200 2230 Direct

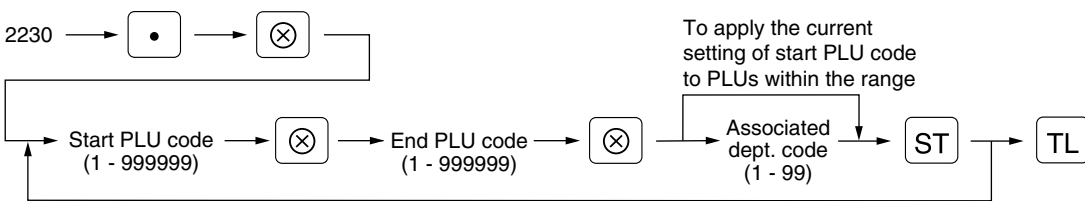
Procedure

For each PLU



**Note** As soon as the programming is completed for one PLU, the next PLU code appears in the display.

For a range of PLUs



Example

For each PLU

Key operation	Print
1200 . ⊗	#1200 *PGM2*
1 ⊗ 2 ST	P000001 (02) /00
2 ST	0.00
TL	0.00
	PL000001 CO
	2 S 0.000
	P000002 (02) /00
	0.00
	0.00
	PL000002 CO
	2 S 0.000

For a range of PLUs

Key operation	Print
2230 . ⊗	#2230 *PGM2*
11 ⊗ 20 ⊗	000011-000020
3 ST	(03)
TL	

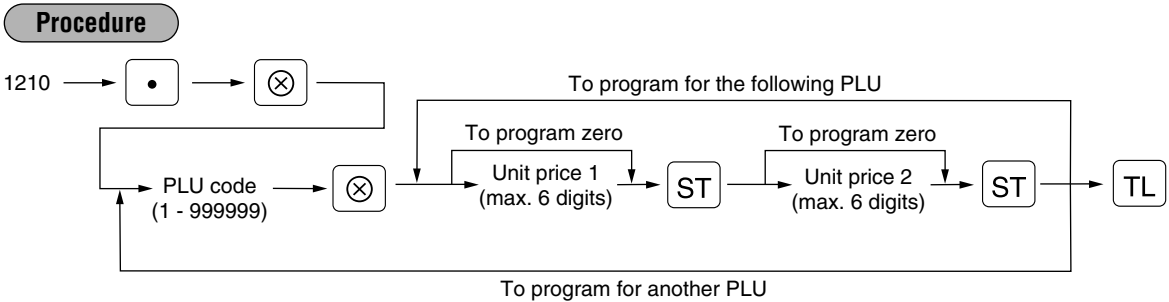
■ Unit prices

PGM 1

PGM 2

1210

Direct



Example

Key operation

1210 • ⊗  
1 ⊗ 125 ST  
ST  
TL

Print

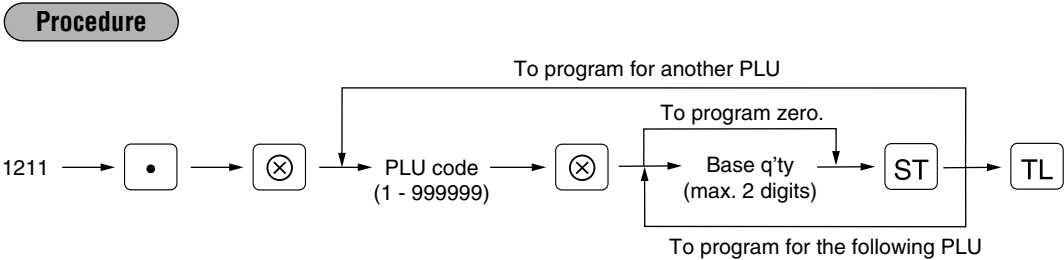
#1210 \*PGM2\*  
  
P000001(O2) /00  
1.25  
0.00  
PL000001 C0  
2 S 0.000

■ Base quantity

PGM 1

PGM 2

1211



Example

Key operation

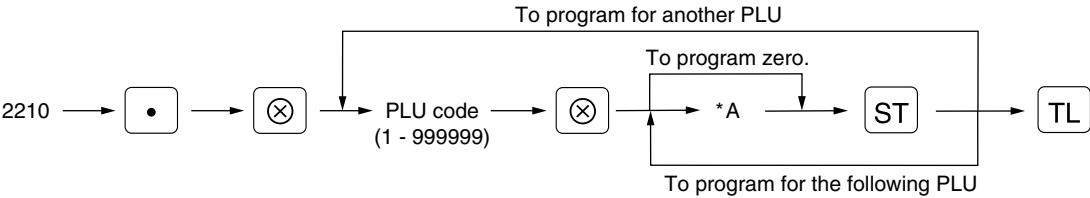
1211 • ⊗  
2 ⊗ 12 ST  
TL

Print

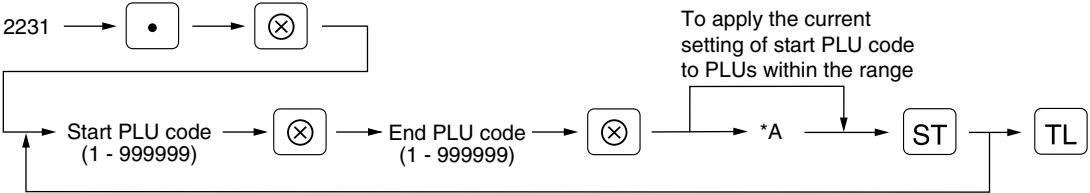
#1211 \*PGM2\*  
  
P000002(O2) /12  
0.00  
0.00  
PL000002 C0  
2 S 0.000

Procedure

For each PLU



For a range of PLUs



* Item:	Selection:	Entry:
A      Type of unit price entry	Inhibit PLU/subdepartment	0
	Open only	1
	Preset only	2
	Open and preset	3
	Delete	4

Example

For each PLU

Key operation

2210 . ⊗  
1 ⊗ 3 ST  
TL

Print

```
#2210 *PGM2*  
  
P000001(O2)      /00  
                  1.25  
                  0.00  
PL000001          C0  
3                S 0.000
```

For a range  
of PLUs

Key operation

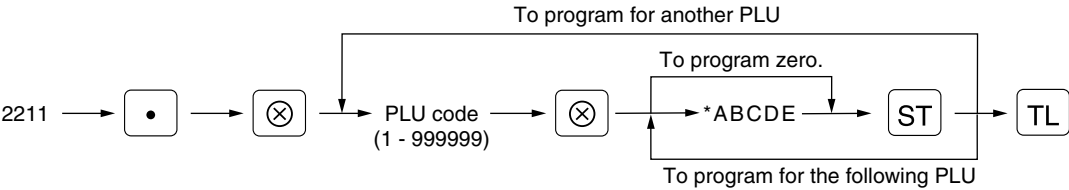
2231 . ⊗  
11 ⊗ 20 ⊗  
3 ST  
TL

Print

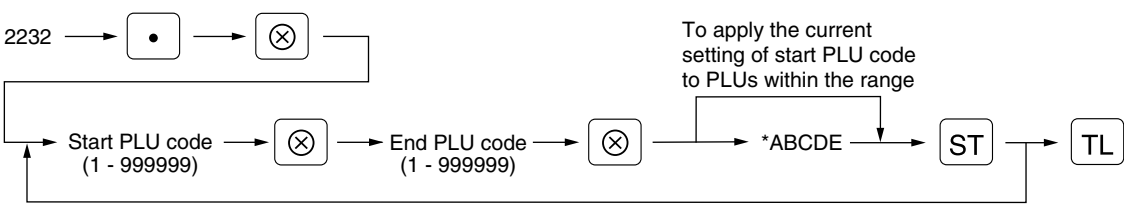
```
#2231 *PGM2*  
  
P000011          -P000020  
3
```

Procedure

For each PLU



For a range of PLUs



* Item:	Selection:	Entry:
A	Sign (+/-)	Set as a plus PLU
		Set as a minus PLU
B	VAT4 or TAX4	Assign "non-taxable"
		Assign "VAT4 or TAX4"
C	VAT3 or TAX3	Assign "non-taxable"
		Assign "VAT3 or TAX3"
D	VAT2 or TAX2	Assign "non-taxable"
		Assign "VAT2 or TAX2"
E	VAT1 or TAX1	Assign "non-taxable"
		Assign "VAT1 or TAX1"

Note

- The tax system of your machine has been factory-set to automatic VAT1 – 4. If you desire to select any of automatic tax1 – 4, manual VAT1 – 4, manual VAT1, manual tax1 – 4, and the combination of automatic VAT1 and the automatic tax2 – 4, consult your dealer.
- When the combination of automatic VAT1 and automatic tax2 – 4 system is selected, one of the TAX2 (D), TAX3 (C) and TAX4 (B) can be selected in combination with VAT1 (E). Example: BCDE = 1001, 0011, 0101
- A PLU not programmed for any of these tax statuses is registered depending on the tax status of the department which the PLU belongs to.

### Example

For each PLU

Key operation

2211     
 2  00001  ST  
       00000  ST  
            TL

Print

```
#2211 *PGM2*

P000002 (O2)      /12
T1                0.00
                  0.00
PL000002          C0
2                 S 0.000
P000003 (O1)      /00
                  0.00
                  0.00
PL000003          C0
2                 S 0.000
```

For a range  
of PLUs

Key operation

2232     
 11  20    
       00001  ST  
            TL

Print

```
#2232 *PGM2*

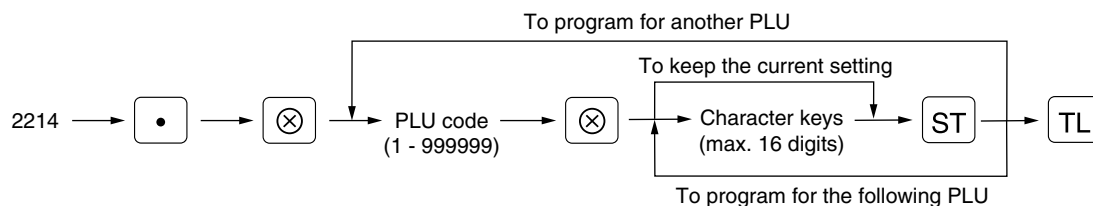
P000011          -P000020
T1
```

## ■ Alphanumeric characters PGM 2 2214

You can program a maximum of 16 characters (item label) for each PLU/subdepartment.

Select the characters you want to program, referring to section “2 How to program alphanumeric characters” in chapter “PRIOR TO PROGRAMMING”.

### Procedure



### Example

Key operation

2214     
       1    
       MILK  ST  
            TL

Print

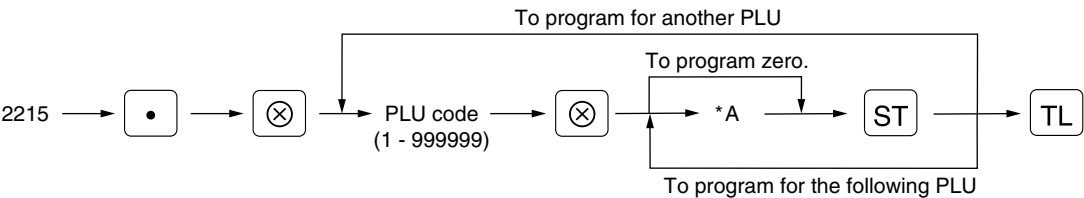
```
#2214 *PGM2*

P000001 (O2)      /00
                  1.25
                  0.00
MILK              C0
3                 S 0.000
```

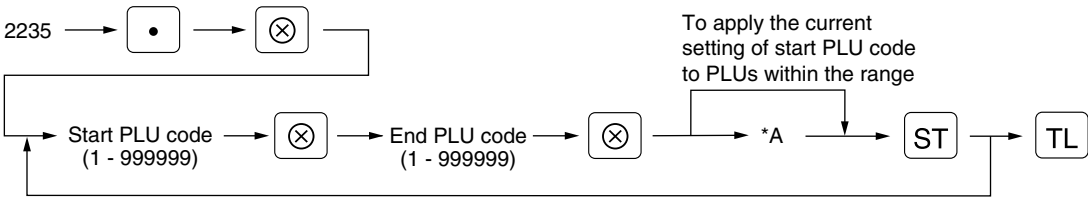
You can assign PLUs/subdepartments to commission groups.

Procedure

For each PLU



For a range of PLUs



\*A: Commission group 0 – 9 (0=no commission)

Example

For each PLU

Key operation

2215 • ⊗  
1 ⊗ 1 ST  
TL

Print

```
#2215 *PGM2*  
  
P000001 (02)      /00  
                  1.25  
                  0.00  
MILK              C1  
3                S 0.000
```

For a range of PLUs

Key operation

2235 • ⊗  
12 ⊗ 14 ⊗  
1 ST  
TL

Print

```
#2235 *PGM2*  
  
P000012      -P000014  
              C1
```



■ Stock quantity

PGM 1

PGM 2

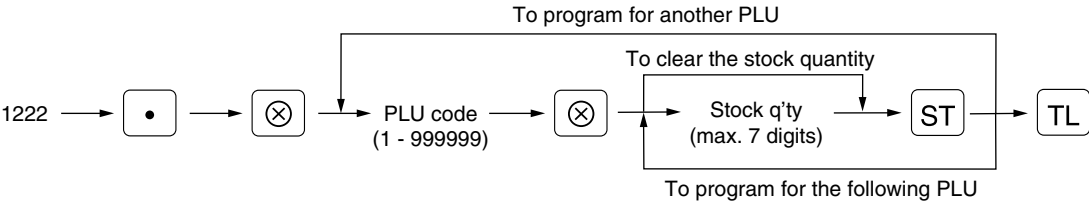
1222

1220

1221

You can assign a stock quantity to each PLU code. When you assign it for the first time, do the following:

Procedure



Example

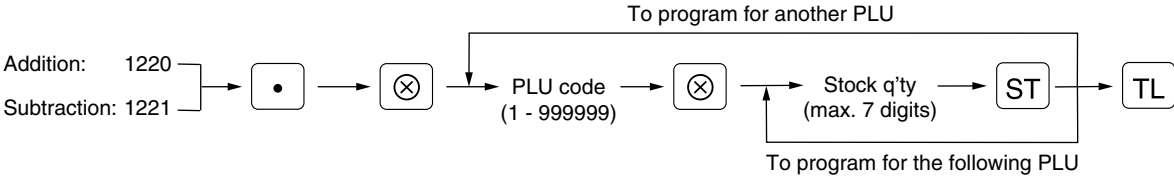
Key operation	Print
1222 • ⊗ 2 ⊗ 10 ST TL	<div>#1222 *PGM2*  P000002 0.000 10.000 S 10.000</div>

Note

If you assign another stock quantity to the PLU code which you have assigned a stock quantity to, it will be overridden.

If you need to add or subtract a stock quantity, do the following:

Procedure



Adding the stock quantity

Example

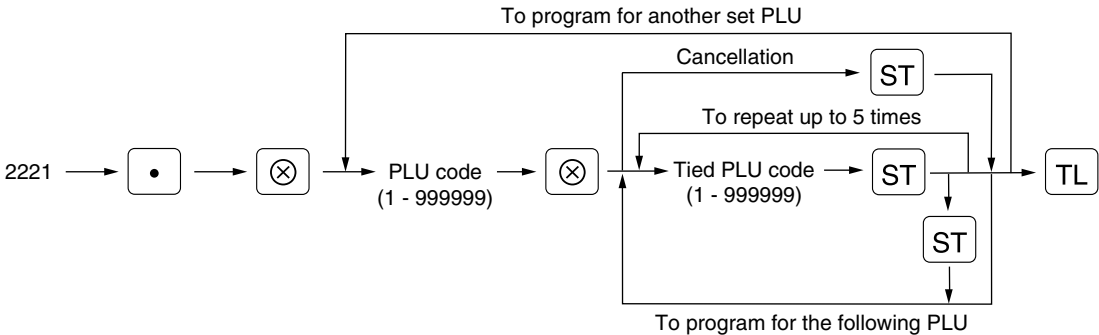
Key operation	Print
1220 • ⊗ 2 ⊗ 4 ST TL	<div>#1220 *PGM2*  P000002 10.000 4.000 S 14.000</div>

Subtracting the stock quantity

Example	Key operation	Print
	1221 . ⊗ 2 ⊗ 1 . 5 ST TL	<div>#1221 *PGM2*  P000002 14.000 -1.500 S 12.500</div>

■ Set PLU PGM 2 2221

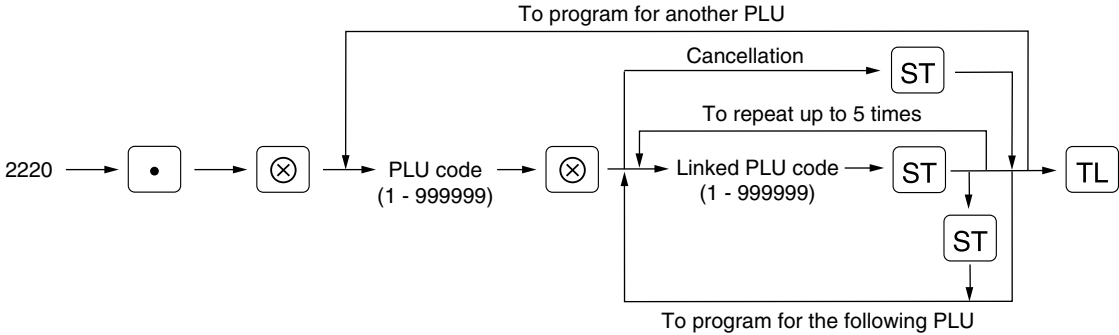
Procedure



**Note** *PLU codes must have already been defined.  
You can program a maximum of 15 set PLUs. A set PLU can be tied to a maximum of 5 PLUs.*

Example	Key operation	Print
	2221 . ⊗ 20 ⊗ 201 ST 202 ST TL	<div>#2221 *PGM2*  P000020 SP000201 P000202</div>

Procedure



Note

PLU codes must have already been defined.  
You can program a maximum of 15 link PLUs. A link PLU can be linked to a maximum of 5 PLUs.

Example

Key operation	Print
2220 • ⊗ 18 ⊗ 25 ST 26 ST 27 ST TL	<div>#2220 *PGM2*  P000018      LP000025                  P000026                  P000027</div>

■ Mix-and-match table

PGM 2

2250

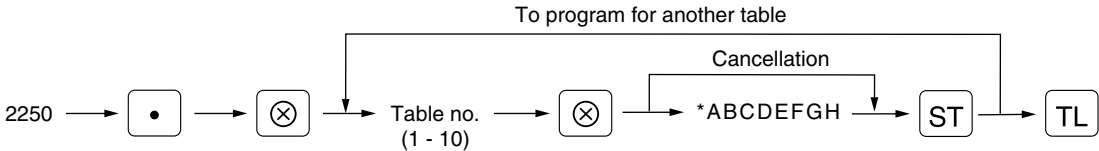
2251

2254

The mix-and-match table consists of the discount amount, and the trip level for discount (satisfying count of entered items) and the table text. You can program a maximum of 10 mix-and-match tables. One table can be assigned maximum 5 kind of items.

Programming of trip level and discount amount

Procedure



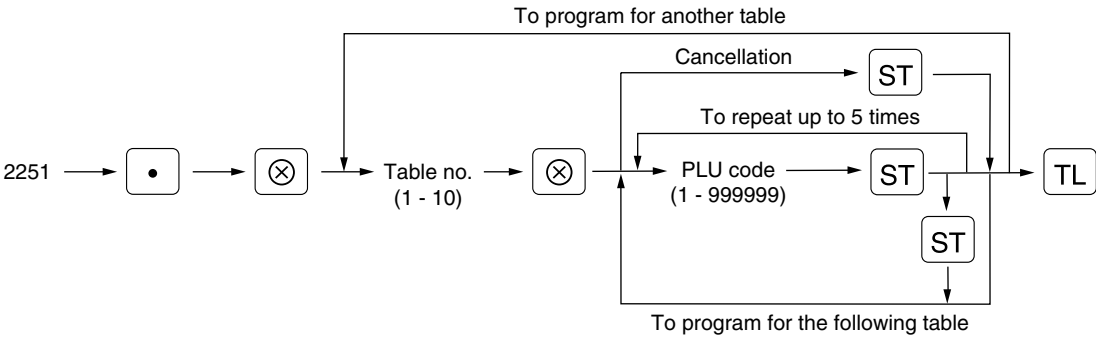
\* AB: Trip level for discount (1 – 99)  
CDEFGH: Discount amount (max. 6 digits)

Example

Key operation	Print
2250 • ⊗ 1 ⊗ 3000100 ST TL	<div>#2250 *PGM2*  #01                  -1.00/03                  ----</div>

Assigning items to the mix-and-match table

Procedure

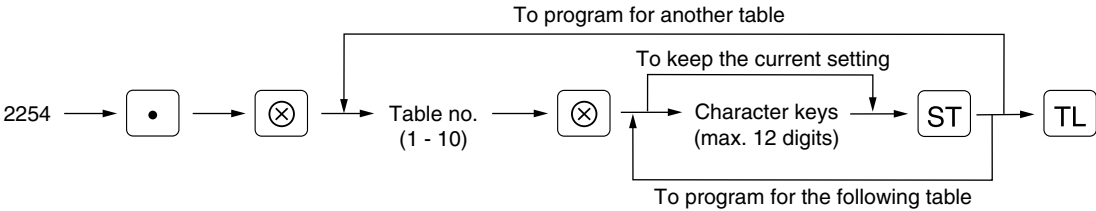


Example

Key operation	Print
2251 • ⊗ 1 ⊗ 10 ST 11 ST TL	<div>#2251 *PGM2*  #01  -1.00/03 P000010 P000011</div>

Programming of table text

Procedure



Example

Key operation	Print
2254 • ⊗ 1 ⊗ DISC1 ST TL	<div>#2254 *PGM2*  #01 DISC1 -1.00/03</div>

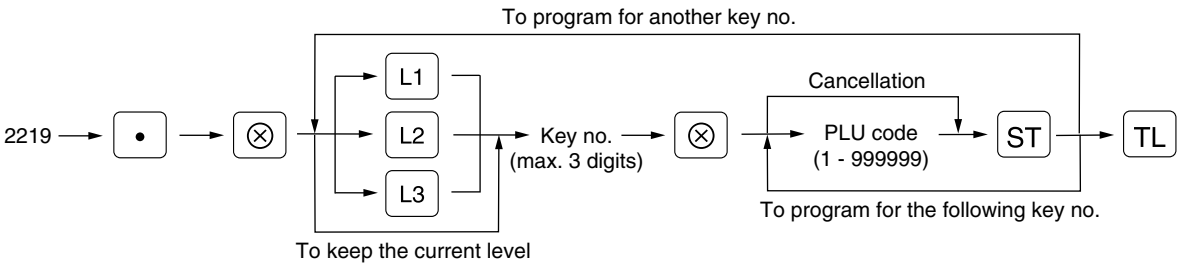
■ Programming of PLU levels and direct PLU keys

PGM 2

2219

You can assign PLU codes to fixed keys in each PLU level and use those keys as direct PLU key. For assigning a PLU level, press the **L1**, **L2** or **L3** key. For example, if you want to assign PLU level 1 and key no. 1 to a PLU code, press the **L1** key and enter 1 before entering the PLU code. For key no. position, refer to section “3 Standard key number layout” in chapter “KEYBOARD”.

Procedure



Note

The key number placement is determined by your local Authorized SHARP Dealer.

Example

Programming so that PLU code 1 (level 1) and 65 (level 2) are assigned to key no. 21

Key operation	Print
2219 • ⊗	#2219 *PGM2*
L1 21 ⊗	
1 ST	
L2 21 ⊗	021 L1 P000001
65 ST	021 L2 P000065
TL	

Key no.

PLU code

## 6 Programming for miscellaneous keys

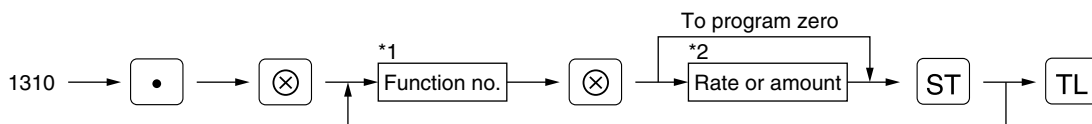
Only function keys which you have programmed on the keyboard will allow the programming.

### ■ Programming the rate (%, EX, commission) and the deduction (⊖) PGM 1

PGM 2 **1310** **Direct**

You can program percent rates, currency exchange rates, deduction amounts and commission rates.

#### Procedure



\*1: Function no.

- |                   |                               |                                |
|-------------------|-------------------------------|--------------------------------|
| 1: For the ⊖ key  | 8: For the %4 key             | 96: For the commission sale 4  |
| 2: For the ⊖2 key | 62: For the EX1 key           | 97: For the commission sale 5  |
| 3: For the ⊖3 key | 63: For the EX2 key           | 98: For the commission sale 6  |
| 4: For the ⊖4 key | 64: For the EX3 key           | 99: For the commission sale 7  |
| 5: For the % key  | 93: For the commission sale 1 | 100: For the commission sale 8 |
| 6: For the %2 key | 94: For the commission sale 2 | 101: For the commission sale 9 |
| 7: For the %3 key | 95: For the commission sale 3 |                                |

\*2: Rate or amount

- 0 — 999999 (Deduction amount)
- 0.00 — 100.00 (% rate)
- 0.000000 — 999.999999 (Currency exchange rate)
- 0.00 — 999.99 (Commission rate)

#### Note

- When you introduce EURO, set the EURO conversion rate on the EX1 key for the period 1 and the period 2.
- You must use a decimal point when setting percentage rates that are fractional.

#### Example

##### Key operation

```

1310 . ⊗
1 ⊗ 1000 ST
5 ⊗ 10 . 25 ST
62 ⊗ 0 . 6068 ST
TL
    
```

##### Print

```

#1310 *PGM2*

F001 (→) 1
S          -10.00
           L18      Deduction amount

F005 %1
S          -10.25%
           L100.00%  Percent rate

F062 EXCH1
           2         0.606800  Currency exchange rate
    
```

■ Programming the tab of foreign currency (EX)

PGM 2

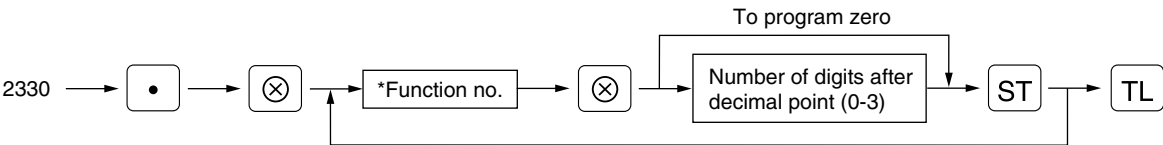
2330

Direct

Note

When you introduce EURO on your register, this setting for the EX1 is automatically programmed by execution of Job #800 in the X2/Z2 mode.

Procedure



\*: Function no.  
62: For the EX1 key      64: For the EX3 key  
63: For the EX2 key      65: For the EX4 key

Example	Key operation	Print
	2330 • ⊗ 62 ⊗ 2 ST TL	<div>#2330 *PGM2* F062 EXCH1 2 0.606800</div> <div>Number of digits after decimal point</div>

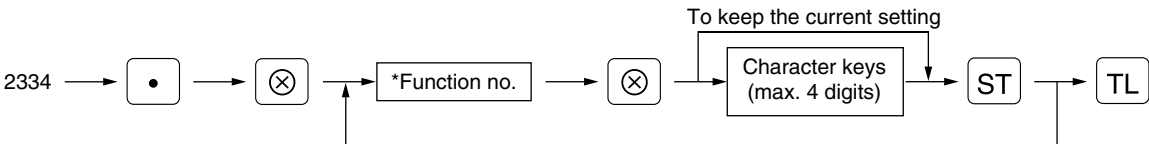
■ Currency description text programming (EX)

PGM 2

2334

You can program a maximum of 4 characters for each of the EX1 through EX4 keys.

Procedure



\*: Function no.  
62: For the EX1 key      64: For the EX3 key  
63: For the EX2 key      65: For the EX4 key

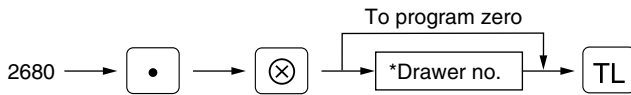
Example	Key operation	Print
	2334 • ⊗ 62 ⊗ [SPACE] [SPACE] [SPACE] * ST TL	<div>#2334 *PGM2* F062 EXCH1 2 0.606800</div> <div>Currency description text</div>

## ■ Assigning the drawer number to the drawer for foreign currency PGM 2 2680

You can assign a number of the drawer which opens when one of the following operations is performed.

- One of EX1 through EX4 is pressed without any entry.
- A transaction is completed with a payment entry of foreign currency.
- An X/Z report is issued.

### Procedure



\*Drawer no.:

0: Inhibit (No drawer opens.)

1: Drawer no. 1

2: Drawer no. 2

### Example

#### Key operation

2680 . ⊗  
2 TL

#### Print

#2680 \*PGM2\*

2

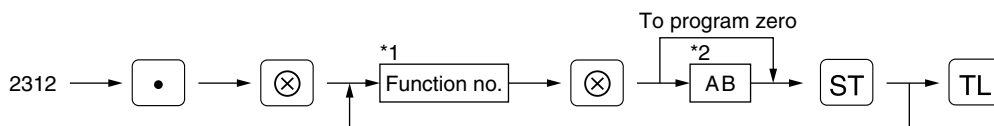
### Note

To perform this programming, an optional drawer must be connected with your register.

## ■ A limit amount (HALO) of entry (⊖, DEPO (+), DEPO (-), RA, PO) PGM 2 2312 Direct

The HALO limit is in effect for the REG-mode operations but can be overridden in the MGR mode. The HALO limit is represented by two figures as follows:

### Procedure



\*1: Function no.

1: For the ⊖ key

2: For the ⊖2 key

3: For the ⊖3 key

4: For the ⊖4 key

45: For the RA key

46: For the RA2 key

47: For the PO key

48: For the PO2 key

50: For the DEPO (+) key

51: For the DEPO (-) key

\*2: AB is the same as  $A \times 10^B$ .

A: Significant digit (0 through 9)

B: Number of zeros to follow significant digit (0 through 8)

For example, presetting 13 (10.00) here means that amount entries of up to 10.00 are allowed in the REG mode. When you preset 18, however, the upper limit amount is 999999.99.



Example

Key operation

Print

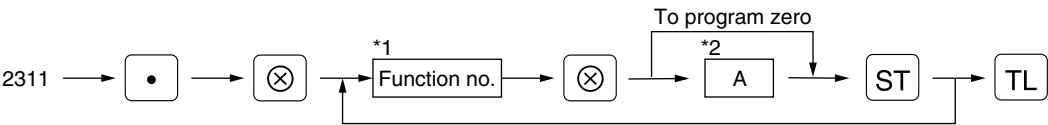
2312  $\cdot$   $\otimes$   
1  $\otimes$  13  $\text{ST}$   
 $\text{TL}$

#2312 \*PGM2\*  
F001  $\langle - \rangle$  1  
S -10.00  
L13 — HALO limit

■ +/- sign ( $\%$ ,  $\ominus$ ) PGM 2 2311 Direct

Programming of the +/- sign assigns the premium or discount function for each key.

Procedure



\*1: Function no.

- 1: For the  $\ominus$  key
- 2: For the  $\otimes 2$  key
- 3: For the  $\otimes 3$  key
- 4: For the  $\otimes 4$  key
- 5: For the  $\%$  key
- 6: For the  $\% 2$  key
- 7: For the  $\% 3$  key
- 8: For the  $\% 4$  key

\*2:

Item:	Selection:	Entry:
A +/- sign	+ (premium) sign	0
	- (discount) sign	1

Example

Key operation

Print

2311  $\cdot$   $\otimes$   
5  $\otimes$  0  $\text{ST}$   
6  $\otimes$  1  $\text{ST}$   
 $\text{TL}$

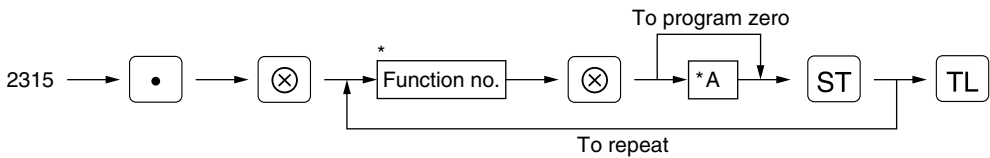
#2311 \*PGM2\*  
F005 %1  
S 10.25%  
L100.00%  
F006 %2  
S -0.00% — “-”: Discount  
L100.00%

■ **Item % or subtotal % selection ( [%] )** PGM 2 **2315** Direct

Item %  
Select this when a percent calculation is desired for the individual department and PLU.

Subtotal %  
Select this when a percent calculation is desired for subtotals.

**Procedure**



- \*: Function no.  
5: For the [%] key  
6: For the [%2] key  
7: For the [%3] key  
8: For the [%4] key
- \*A:  
0: Subtotal %  
1: Item %

**Example**

Key operation	Print
2315 . ⊗ 5 ⊗ 1 ST 6 ⊗ 0 ST TL	<div>#2315 *PGM2*</div> <div>F005 %1 I 10.25% L100.00%</div> <div>F006 %2 S -0.00% L100.00%</div>

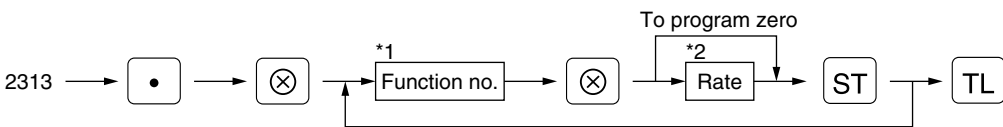
Item %

Subtotal %

■ **Percent rate limitation ( [%] )** PGM 2 **2313**

You can program the upper limit of percent rates for percent entries.  
(Percent entries that exceed the upper limit may be overridden in the MGR mode.)

**Procedure**



- \*1: Function no.  
5: For the [%] key  
6: For the [%2] key  
7: For the [%3] key  
8: For the [%4] key
- \*2: Rate  
0.00 – 100.00 (Entering 0.00 inhibits the open percent rate entry.)

**Note** 10.00% can be entered as 1 0 or 1 0 . 0 0 . The . key is needed only for fractional entry.

Example

Key operation

2313    
5  15  00

Print

```
#2313 *PGM2*  
  
F005 %1  
I  
L 10.25%  
L 15.00%
```

Percentage limit

■ Item ⊖ or subtotal ⊖ selection (⊖) PGM 2 2316 Direct

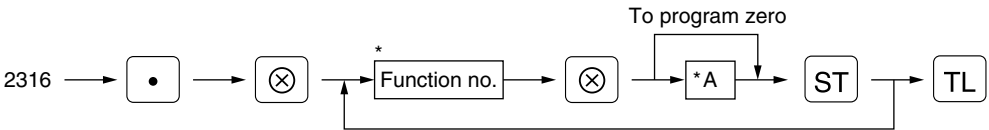
Item ⊖

Select this when a deduction calculation is desired for the individual department and PLU.

Subtotal ⊖

Select this when a deduction calculation is desired for subtotals.

Procedure



- \*: Function no.
- 1: For the ⊖ key
  - 2: For the ⊖2 key
  - 3: For the ⊖3 key
  - 4: For the ⊖4 key

- \*A:
- 0: Subtotal ⊖
  - 1: Item ⊖

Example

Key operation

2316    
1  1   
2  0

Print

```
#2316 *PGM2*  
  
F001 (→) 1  
I -10.00  
L13  
F002 (→) 2  
S -0.00  
L18
```

Item ⊖

Subtotal ⊖

## 7 Programming for the TL, CA2, CH through CH4, and CR1 through CR4 keys

### ■ Functional programming PGM 2 2320 Direct

You can set each media for:

#### EFT transaction

##### Slip printing

If media entries must be printed on the slip printer, set the corresponding media for compulsory slip printing.

##### Footer printing

This programming decides whether or not your machine should print a message at the foot of a receipt when a specified media key is used.

##### Non-add code compulsory

You can enforce the non-add code entry when a media entry is made.

##### Change enable (over-tender)

Either change enable or disable can be selected for a corresponding media key.

##### Compulsory validation print

If media entries must be validated, set the corresponding media for compulsory validation print.

##### Drawer open

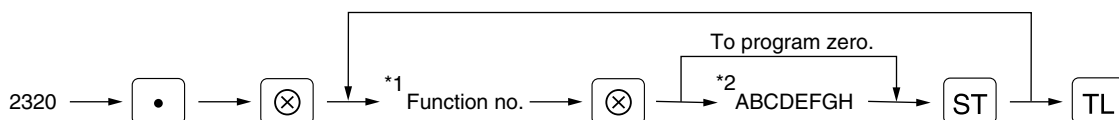
You can program each media key to or not to open the drawer.

##### Amount tendered compulsory

You may select amount tendered compulsory or optional for the TL, CA2 and CH through CH4 keys.

You may select amount tendered compulsory or inhibited for the CR1 through CR4 keys.

#### Procedure



\*1: Function no.

52: For the TL key

53: For the CA2 key

54: For the CH key

55: For the CH2 key

56: For the CH3 key

57: For the CH4 key

58: For the CR1 key

59: For the CR2 key

60: For the CR3 key

61: For the CR4 key

\*2

Item:	Selection:	Entry:
<b>A</b> EFT transaction	select compulsory	1
	select non-compulsory	0
<b>B</b> Slip printing	select compulsory	1
	select non-compulsory	0
<b>C</b> Footer printing	select footer printing on selected media Yes	1
	select footer printing on selected media No	0
<b>D</b> Non-add code compulsory	select compulsory non-add code entry	1
	select optional non-add code entry	0
<b>E</b> Change enable (over-tender enable)	select change disable	1
	select change enable	0
<b>F</b> Validation print compulsory	select compulsory validation	1
	select optional validation	0
<b>G</b> Drawer open	have the drawer remain closed	1
	have the drawer open	0
<b>H</b> Compulsory amount tendered	select compulsory amount tendered	1
	select optional amount tendered for the TL, CA2 or CH to CH4 keys	0
	Inhibit amount tendered for CR1 to CR4 keys	0

### Example

### Key operation

2320    
 60  00000001

### Print

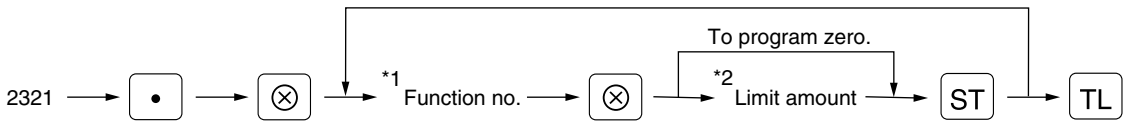
#2320 \*PGM2\*

F060 CREDIT3 L18  
 00000001

■ **High amount lockout (HALO) for cheque cashing, cheque change and cash in drawer in drawer** PGM 2 2321

You can program the upper limit amounts for cheque cashing, cheque change and cash in drawer.

**Procedure**



- \*1: Function no.

  - 49: For cheque cashing
  - 77: For cheque change
  - 74: For cash in drawer (sentinel)
- \*2: Limit amount

  - 0 through 999999.99
  - 0 through 999999.99
  - 0 through 999999.99

**Example**

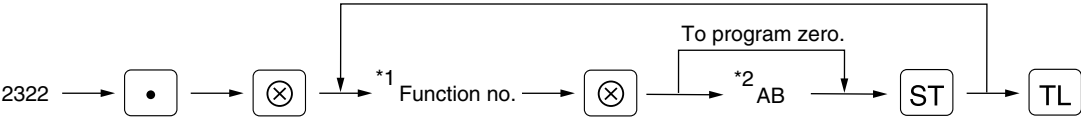
Key operation	Print
2321 . ⊗ 49 ⊗ 9999 ST TL	<div>#2321 *PGM2*  F049 CA/CHK  99.99</div>

■ **High amount lockout (HALO) of entry for media keys** PGM 2 2322 Direct

The HALO limit is in effect for REG-mode operations but can be overridden in the MGR mode.

The HALO limit is represented by two figures as follows:

**Procedure**



- \*1: Function no.

52: For the TL key

53: For the CA2 key

54: For the CH key

55: For the CH2 key

56: For the CH3 key

57: For the CH4 key

58: For the CR1 key

59: For the CR2 key

60: For the CR3 key

61: For the CR4 key

- \*2: AB is the same as A x 10<sup>B</sup>.

A: Significant digit (0 through 9)

B: Number of zeros to follow significant digit (0 through 8)

When you program 18, however, the upper limit amount is 999999.99.

Example	Key operation	Print
	2322 <input type="text" value="."/> <input type="text" value="⊗"/> 60 <input type="text" value="⊗"/> 15 <input type="text" value="ST"/> <input type="text" value="TL"/>	<div>             #2322 *PGM2*               F060 CREDIT3                      L15                 00000001           </div>

8

Programming of function text

■

Programming

PGM 2

2314

You can program a maximum of 12 characters for each function key and other functions using the list on the following pages. Select the characters you want to program referring to section “2 How to program alphanumeric characters” in chapter “PRIOR TO PROGRAMMING.”

Procedure



\* Function no.: See “List of function texts” on the following pages.

Example	Key operation	Print
	2314 <input type="text" value="."/> <input type="text" value="⊗"/> 56 <input type="text" value="⊗"/> CHECK3 <input type="text" value="ST"/> <input type="text" value="TL"/>	<div>             #2314 *PGM2*               F056 CHECK3                      L18                 00000000           </div>

## List of function texts

Function no.	Key or function	In default of programming
1	⊖ 1	(-) 1
2	⊖ 2	(-) 2
3	⊖ 3	(-) 3
4	⊖ 4	(-) 4
5	%1	% 1
6	%2	% 2
7	%3	% 3
8	%4	% 4
9	Net 1	<b>NET 1</b>
10	Differ	DIFFER
11	Taxable 1 subtotal	TAX1 ST
12	Taxable 2 subtotal	TAX2 ST
13	Taxable 3 subtotal	TAX3 ST
14	Taxable 4 subtotal	TAX4 ST
15	VAT/tax 1	VAT 1
16	VAT/tax 2	VAT 2
17	VAT/tax 3	VAT 3
18	VAT/tax 4	VAT 4
19	Total tax	TTL TAX
20	Net without tax	<b>NET</b>
21	VAT shift	VAT SFT
22	VAT/tax delete	TAX DELE
23	Net 2	<b>NET 2</b>
24	Set PLU discount	SETPLU-
25	Promotion discount	DISCOUNT
26	Coupon-like PLU	CP PLU
27	Refund	REFUND
28	Void	∞
29	Void mode total	∞ MODE
30	MGR void	MGR ∞
31	Subtotal void	SBTL ∞
32	Hash void	HASH ∞
33	Hash refund	HASH RF
34	VP counter	VP CNT
35	Bill counter	BILL CNT
36	No sale	NO SALE
37	PBAL	***PBAL
38	NBAL	***NBAL
39	Guest check copy counter	G.C.COPY CNT
40	Customer (transaction count)	GUEST
41	Order total	ORDER TL
42	Paid total	PAID TL
43	Average	AVE.
44	Order total – Paid total	<b>O – P</b>
45	RA	***RA
46	RA2	***RA2
47	PO	***PO

Function no.	Key or function	In default of programming
48	PO2	***PO2
49	Cheque cashing	CA/CHK
50	Deposit (+)	DEPOSIT
51	Deposit (-)	DEPO.(-)
52	Cash	<b>C</b> ASH
53	Cash 2	<b>C</b> ASH2
54	Cheque 1	CHECK1
55	Cheque 2	CHECK2
56	Cheque 3	CHECK3
57	Cheque 4	CHECK4
58	Credit 1	CREDIT1
59	Credit 2	CREDIT2
60	Credit 3	CREDIT3
61	Credit 4	CREDIT4
62	Exchange 1	EXCH1
63	Exchange 2	EXCH2
64	Exchange 3	EXCH3
65	Exchange 4	EXCH4
66	Exchange 1 cheque	EX1 CHK
67	Exchange 1 credit	EX1 CR
68	Domestic currency 1	DOM.CUR1
69	Domestic currency 2	DOM.CUR2
70	Domestic currency 3	DOM.CUR3
71	Domestic currency 4	DOM.CUR4
72	Domestic currency for EX1 cheque	DOM.CUR1
73	Domestic currency for EX1 credit	DOM.CUR1
74	Cash in drawer	****CID
75	Cheque in drawer	*CH ID
76	Cash/cheque in drawer	CA/CH ID
77	Change for cheque	CHK/CG
78	Group 1 for department	<b>G</b> ROUP01
79	Group 2 for department	<b>G</b> ROUP02
80	Group 3 for department	<b>G</b> ROUP03
81	Group 4 for department	<b>G</b> ROUP04
82	Group 5 for department	<b>G</b> ROUP05
83	Group 6 for department	<b>G</b> ROUP06
84	Group 7 for department	<b>G</b> ROUP07
85	Group 8 for department	<b>G</b> ROUP08
86	Group 9 for department	<b>G</b> ROUP09
87	(+) Dept total	*DEPT TL
88	(-) Dept total	DEPT(-)
89	Hash (+) total	*HASH TL
90	Hash (-) total	HASH(-)
91	Bottle return (+) total	*BTTL TL
92	Bottle return (-) total	BTTL(-)
93	Commission sale 1	COM.SAL1
94	Commission sale 2	COM.SAL2



Function no.	Key or function	In default of proramming
95	Commission sale 3	COM.SAL3
96	Commission sale 4	COM.SAL4
97	Commission sale 5	COM.SAL5
98	Commission sale 6	COM.SAL6
99	Commission sale 7	COM.SAL7
100	Commission sale 8	COM.SAL8
101	Commission sale 9	COM.SAL9
102	Non commission sale	NON COM.
103	Commission amount 1	COM.AMT1
104	Commission amount 2	COM.AMT2
105	Commission amount 3	COM.AMT3
106	Commission amount 4	COM.AMT4
107	Commission amount 5	COM.AMT5
108	Commission amount 6	COM.AMT6
109	Commission amount 7	COM.AMT7
110	Commission amount 8	COM.AMT8
111	Commission amount 9	COM.AMT9
112	Commission amount total	COM.TTL
113	Cash/cheque is	CA/CH IS
114	Exchange 1 is	EXCH1 IS
115	Exchange 2 is	EXCH2 IS
116	Exchange 3 is	EXCH3 IS
117	CCD differ	CCD DIF.
118	CCD differ total	DIF. TL
119	Total	***TOTAL
120	Subtotal	SUBTOTAL
121	Old balance	OLD BAL.
122	New balance	BALANCE
123	Department report title	<b>DEPT</b>
124	Group report title	<b>GROUP</b>
125	PLU report title	<b>PLU</b>
126	Set PLU report title	SET PLU
127	PLU stock report title	STOCK

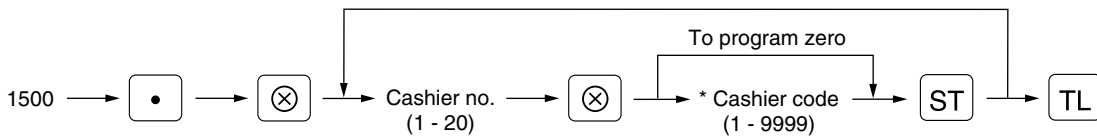
Function no.	Key or function	In default of proramming
128	PLU zero sales report title	ZERO SALES
129	Price category report title	CATEGORY
130	Transaction report title	<b>TRANS.</b>
131	Total in drawer report title	<b>TL-ID</b>
132	Commission sales report title	SALES
133	CCD report title	<b>CCD</b>
134	Clerk report title	<b>CLERK</b>
135	Cashier report title	CASHIER
136	Hourly report title	<b>HOURLY</b>
137	Daily net report title	<b>DAILY</b>
138	Balance report title	BALANCE
139	PBLU report title	<b>PBLU</b>
140	PBLU code text	PBLU#
141	Non-add code text	#
142	English check print	CHECK PR
143	PLU subtotal	PLU ST
144	Sales q'ty	ITEMS
145	Merchandise subtotal	MDSE ST
146	Net 1 (Taxable 1 - VAT/tax 1)	NET 1
147	Net 2 (Taxable 2 - VAT/tax 2)	NET 2
148	Net 3 (Taxable 3 - VAT/tax 3)	NET 3
149	Net 4 (Taxable 4 - VAT/tax 4)	NET 4
150	Difference subtotal	DIFF ST
151	Due	DUE
152	Change	CHANGE
153	Copy receipt title	<b>COPY</b>
154	Guest check copy title	G.C COPY
155	Guest check receipt title	<b>BILL</b>
156	Slip print journal message	SLIP PR.
157	Slip next page	NEXT P.
158	Town name 1	TOWNNAMETOWN
159	Town name 2 (4 characters)	NAME
160	Exchange 1 change (display)	EX1 CHG

## 9 Cashier and clerk programming

### ■ Cashier code PGM 1 PGM 2 1500

You can assign a cashier code to each cashier.

#### Procedure



\* Programming cashier code "0" inhibits entries of the cashier code.

#### Example

##### Key operation

1500 • ⊗  
1 ⊗ 1111 ST  
4 ⊗ 1014 ST  
TL

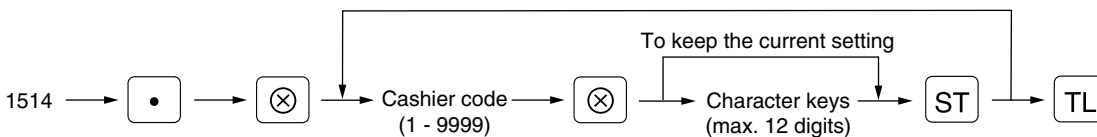
##### Print

```
#1500 *PGM2*  
01CSR# CASHIER01 1111  
0001-9999 000D1  
04CSR# CASHIER04 1014  
0001-9999 000D1
```

### ■ Cashier name PGM 1 PGM 2 1514

You can program a maximum of 12 characters (cashier name) for each cashier. Select the characters you want to program referring to section "2 How to program alphanumeric characters" in chapter "PRIOR TO PROGRAMMING."

#### Procedure



A cashier code you have programmed for the cashier by job code #1500.

#### Example

##### Key operation

1514 • ⊗  
1111 ⊗ MAYER ST  
TL

##### Print

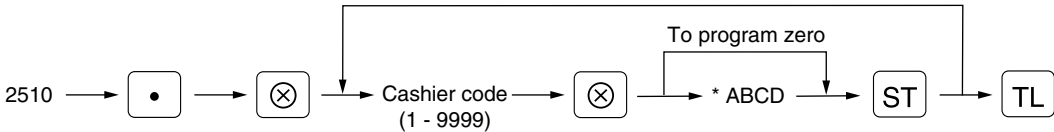
```
#1514 *PGM2*  
01CSR# MAYER 1111  
0001-9999 000D1
```

■ Functional programming for cashiers

PGM 2

2510

Procedure



A cashier code you have programmed for the cashier by job #1500.

* Item:		Selection:	Entry:
A	Guest check copy	Disable	1
		Enable	0
B	VAT shift	Yes	1
		No	0
C	Price level	Price level 2	1
		Price level 1 (ordinary level)	0
D	Drawer	Set the drawer no. 1 or 2	1 or 2
		Use no drawer	0

Example

Key operation

2510 . ⊗  
1111 ⊗ 0001 ST  
TL

Print

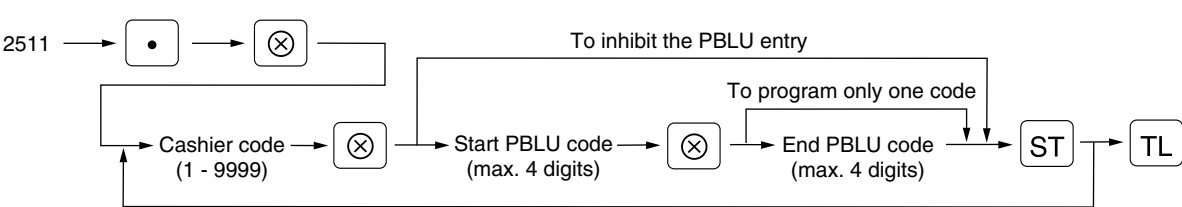
#2510 \*PGM2\*  
  
01CSR# MAYER 1111  
0001-9999 000D1

■ Programming of PBLU code

PGM 2

2511

Procedure



Example

Key operation

2511 . ⊗  
1111 ⊗ 20 ⊗  
30 ST  
TL

Print

#2511 \*PGM2\*  
  
01CSR# MAYER 1111  
0020-0030 000D1

■ Clerk code

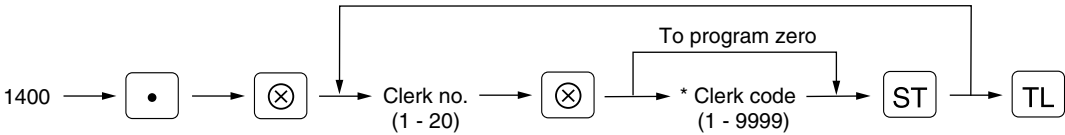
PGM 1

PGM 2

1400

You can assign a clerk code to each clerk.

Procedure



\* Programming clerk code “0” inhibits entries of the clerk code.

Example

Key operation

1400 • ⊗  
1 ⊗ 2111 ST  
4 ⊗ 2014 ST  
TL

Print

#1400 \*PGM2\*

01CLK# CLERK012111

04CLK# CLERK042014

■ Clerk name

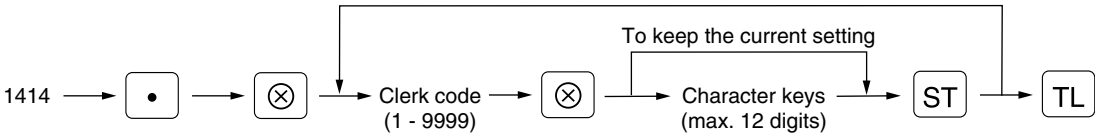
PGM 1

PGM 2

1414

You can program a maximum of 12 characters (clerk name) for each clerk. Select the characters you want to program referring to section “2 How to program alphanumeric characters” in chapter “PRIOR TO PROGRAMMING.”

Procedure



A clerk code you have programmed for the clerk by the job #1400.

Example

Key operation

1414 • ⊗  
2111 ⊗ NILS ST  
TL

Print

#1414 \*PGM2\*

01CLK# NILS2111

**■ Programming for optional feature selection**

PGM 2

2616

Your register enables you to select the following options.

**OP X/Z mode availability**

When a cashier need to take the cashier/clerk X/Z report, he or she will use the OP X/Z mode.

This programming determines whether he or she will be allowed to use this mode.

**Note**

*You can take cashier/clerk X and Z reports in the X1/Z1 mode regardless of the above programming.*

**Paid-out in the REG mode****Refund in the REG mode****Direct void in the REG mode****Indirect void in the REG mode****Subtotal void in the REG mode****Validation printing in a refund entry****First item direct void****PLU level shift mode**

- Automatic return mode: This mode automatically shifts the PLU level back to level 1 (ordinary level) after a direct PLU entry.
- Lock shift mode: This mode holds the current PLU level until making a PLU level shift operation (pressing a PLU level shift key).

**Available mode for PLU level shift****Printing of the number of purchased items****Time printing on the receipt/journal****Journal print form**

You may choose either of the following forms.

- Detailed journal print that shows the details of all entries – the same information as printed on the receipt.
- Summary journal print that shows information about all entries other than normal department entries (entries into “+” departments and their associated “+” PLUs).

**Availability of the item validation printing****Validation printing in a deduction (⊖) entry****Zero skip for various reports****VAT/tax amount, taxable amount and net amount printing on the receipt/journal****Automatic return timing for PLU level**

- By one receipt: Returns the PLU level to level 1 by one receipt.
- By one item: Returns the PLU level to level 1 by one item entry.

**VAT shift method**

- VAT shift by cashier: VAT shift is performed by the operation of a cashier who has been assigned to do the VAT shift operation (Refer to job #2510).
- VAT shift by shift key: VAT shift is performed by pressing the VAT shift key.

**PLU price shift method**

- Price shift by cashier: Price shift is performed by the operation of a cashier who has been assigned to do the price shift operation (Refer to job #2510).
- Price shift by shift key: Price shift is performed by pressing the price level shift key.

**Available mode for PLU price shift****PLU price shift mode**

- Automatic return mode: This mode automatically shifts the price level back to price 1 (ordinary level) after the entry.
- Lock shift mode: This mode holds the current price level until making a price shift operation (pressing the price level shift key).

Automatic return timing for PLU price level

- By one receipt: Returns the price level to price 1 by one receipt.
- By one item: Returns the price level to price 1 by one item entry.

VAT/tax amount, taxable amount and net amount printing on the slip

Time printing on the slip

No sale in REG mode

Finalization when the subtotal amount is zero in the REG mode

Exchange 1 calculation method (for EURO settings)

When you do not introduce EURO, keep the default setting (multiplication).  
When you introduce EURO, this setting is automatically set by the operation of job #800 in the X2/Z2 mode.  
The calculation method is as follows:  
In case that “Division” is selected for the period 1.

$$\text{Domestic (national) currency amount} \div \text{Exchange 1 rate (EURO conversion rate)} = \text{Exchange 1 amount (EURO amount)}$$

In case that “Multiplication” is selected for the period 2.

$$\text{Domestic currency amount (EURO amount)} \times \text{Exchange 1 rate (EURO conversion rate)} = \text{Exchange 1 amount (national currency amount)}$$

Cheque/credit operation for exchange 1

You can set whether you receive foreign currency (exchange 1) amount by cheque or credit or not.

Printing of the exchange 1 total amount and change amount on the receipt/journal

Total and change amounts in exchange 1 currency are printed respectively below each of the total and exchange amounts in domestic currency.

When you introduce EURO, this setting is automatically set by the operation of job #800 in the X2/Z2 mode as follows:

On the period 1, EURO amount converted from national currency is printed below the national currency.  
On the period 2, national currency converted from EURO amount is printed.

Printing of the exchange 1 total amount at the total (payment) validation printing

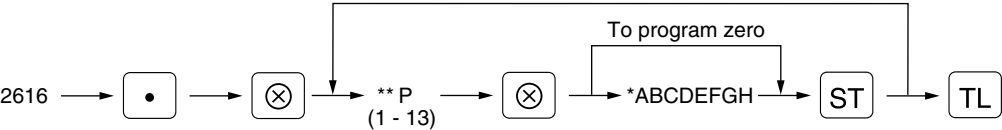
Footer graphic logo printing

Credit counting when RA/PO entry is finalized with the credit key

Separator line in the report

Link PLU printing format

Procedure



Example

Key operation

2616 [.] [⊗]  
3 [⊗] 00000010 [ST]  
[TL]

Print

#2616	*PGM2*
03	00000010

\*\*P: 1

* Item:	Selection:	Entry:
<b>A</b> OP X/Z mode	Enable	0
	Disable	1
<b>B</b> Paid-out in REG mode	Enable	0
	Disable	1
<b>C</b> Always enter 0.		0
<b>D</b> Refund in the REG mode	Enable	0
	Disable	1
<b>E</b> Direct void in the REG mode	Enable	0
	Disable	1
<b>F</b> Indirect void in the REG mode	Enable	0
	Disable	1
<b>G</b> Subtotal void in the REG mode	Enable	0
	Disable	1
<b>H</b> Validation printing in a refund entry	Non-compulsory	0
	Compulsory	1

\*\*P: 2

* Item:	Selection:	Entry:
<b>A</b> The first item direct void	Enable	0
	Disable	1
<b>B</b> PLU level shift mode	Automatic return mode	0
	Lock shift mode	1
<b>C</b> Available mode for PLU level shift	REG and MGR modes	0
	MGR mode only	1
<b>D</b> Printing of the number of purchased items	No	0
	Yes	1
<b>E</b> Time printing on the receipt/journal	Yes	0
	No	1
<b>F</b> Journal print form	Detailed	0
	Limited	1
<b>G</b> Availability of the item validation printing	Enable	0
	Disable	1
<b>H</b> Validation printing in a deduction (⊖) entry	Non-compulsory	0
	Compulsory	1

\*\*P: 3

* Item:	Selection:	Entry:
<b>A</b> Always enter 0.		0
<b>B</b> Zero skip in clerk report	Yes	0
	No	1
<b>C</b> Zero skip in cashier report	Yes	0
	No	1
<b>D</b> Zero skip in transaction report	Yes	0
	No	1
<b>E</b> Zero skip in department report	Yes	0
	No	1
<b>F</b> Zero skip in PLU report	Yes	0
	No	1
<b>G</b> Zero skip in hourly report	Yes	0
	No	1
<b>H</b> Zero skip in daily net report	Yes	0
	No	1

\*\*P: 4

* Item:	Selection:	Entry:
A Always enter 0.		0
B Always enter 0.		0
C VAT/tax amount printing on the receipt/journal	Print	0
	Do not print	1
D Taxable amount printing on the receipt/journal	Print	0
	Do not print	1
E Net amount printing on the receipt/journal	Print	0
	Do not print	1
F Always enter 0.		0
G Always enter 0.		0
H Automatic return timing for PLU level	By one item	0
	By one receipt	1

\*\*P: 5

* Item:	Selection:	Entry:
A Always enter 0.		0
B Always enter 0.		0
C Always enter 0.		0
D VAT shift method	By cashier	0
	By shift key	1
E PLU price shift method	By shift key	0
	By cashier	1
F Available mode for PLU price shift	REG and MGR modes	0
	MGR mode only	1
G PLU price shift mode	Automatic return mode	0
	Lock shift mode	1
H Automatic return timing for PLU price level	By one item	0
	By one receipt	1

\*\*P: 6

* Item:	Selection:	Entry:
A VAT/tax amount printing on the slip	Print	0
	Do not print	1
B Taxable amount printing on the slip	Print	0
	Do not print	1
C Net amount printing on the slip	Print	0
	Do not print	1
D Time printing on the slip	Print	0
	Do not print	1
E Always enter 0.		0
F Always enter 0.		0
G Always enter 0.		0
H Always enter 0.		0





\*\*P: 7

* Item:	Selection:	Entry:
A Always enter 0.		0
B Always enter 0.		0
C No sale in REG mode	Enable	0
	Disable	1
D Finalization when the subtotal amount is zero in the REG mode	Enable	0
	Disable	1
E Always enter 0.		0
F Always enter 0.		0
G Always enter 0.		0
H Always enter 0.		0

\*\*P: 8 (ABCDEFGH: Always enter 0.)

\*\*P: 9

* Item:	Selection:	Entry:
A Always enter 0.		0
B Exchange 1 calculation method (for EURO settings)	Multiplication	0
	Division	1
C Cheque/credit operation for exchange 1	No	0
	Yes	1
D Printing of the exchange 1 total amount and change amount on the receipt/journal	No	0
	Yes	1
E Printing of the exchange 1 total amount at the total (payment) validation printing	No	0
	Yes	1
F Always enter 0.		0
G Always enter 0.		0
H Footer graphic logo printing	No	0
	Yes	1

**Note**

The items B and D are automatically set by the operation of job #800 in the X2/Z2 mode.

\*\*P: 10 to 12 (ABCDEFGH: Always enter 0.)

\*\*P: 13

* Item:	Selection:	Entry:
A Credit counting when RA/PO entry is finalized with the credit key	No	0
	Yes	1
B Separator line in the report	1 line space	0
	Separator line	1
C Link PLU printing format	Master PLU with total amount	0
	Each PLU	1
D Always enter 0.		0
E Always enter 0.		0
F Always enter 0.		0
G Always enter 0.		0
H Always enter 0.		0

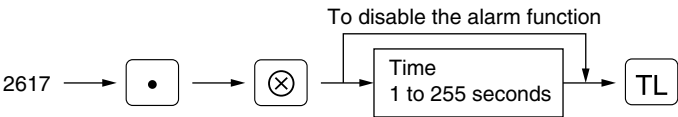
■ Programming alarm length of time with drawer opening

PGM 2

2617

If the drawer still remains open when a specified length of time has elapsed, your machine gives the alarm.

Procedure



Example

Key operation	Print
2617 <span>•</span> <span>⊗</span> 30 <span>TL</span>	<div>#2617 *PGM2*  030</div>

Note

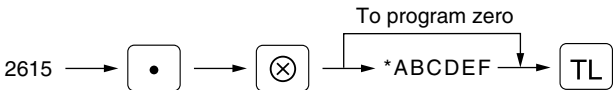
Your machine starts to monitor how long the drawer is kept open the moment the drawer is opened at the end of a transaction in the REG/VOID mode. It stops the time monitoring when a valid key (except the VP and RCPT keys) is pressed for the next transaction. It restarts the time monitoring after that transaction is ended. You can stop the buzzer alarm by closing the drawer. No key entries can be made while the buzzer is sounding.

■ Programming of validation printing, slip printing, and difference subtotal printing

PGM 2

2615

Procedure



- \* AB: Initial line feed for a slip (0 – 64 lines)
- CD: Maximum number of lines printable on a slip (0 – 99)
- E: Number of times of validation printing (0 – 9)
- F: Feed lines after printing of a difference subtotal (0 – 9 lines)

Example

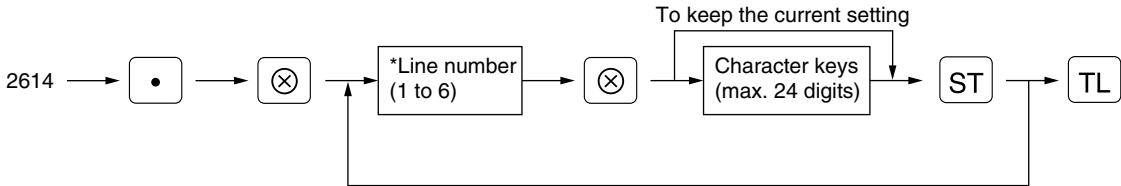
Key operation	Print
2615 <span>•</span> <span>⊗</span> 009910 <span>TL</span>	<div>#2615 *PGM2*  00 99 1 0</div>

■ Programming of logo messages PGM 2 2614

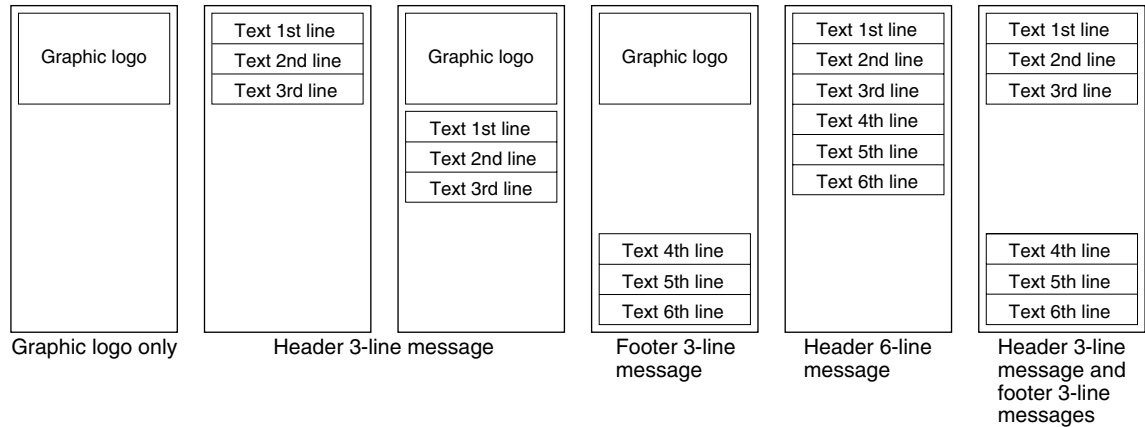
Your register can print programmed messages for customers on every receipt. On the standard model, only graphic logo (ER-A410)/only header 3-line message (ER-A420) is printed on the receipt. (If you want a graphic logo customerized for your store, please consult your dealer.)

If you want to print logo message, please consult your dealer too. You have five options described below. Select the characters you want to program, referring to section “2 How to program alphanumeric characters” in chapter “PRIOR TO PROGRAMMING.”

Procedure



- \* “Header 3-line message” type: 1 to 3
- “Footer 3-line message” type : 4 to 6
- “Header 6-line message” type: 1 to 3
- “Header 3-line and footer 3-line message” type: 1 to 6 (1 to 3 as header, 4 to 6 as footer)



Example To program the following logo messages by using 3 lines:

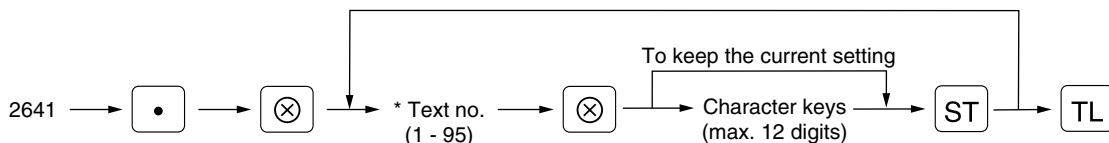
=== YOUR ===  
== STORE ==  
MESSAGE

Key operation	Print
2614 • ⊗ 1 ⊗ [SPACE] [SPACE] [SPACE] [SPACE] [SPACE] [SPACE] [SPACE] [DC] YOUR [DC] [SPACE] [SPACE] [SPACE] [SPACE] ST 2 ⊗ [SPACE] [SPACE] [SPACE] [SPACE] [SPACE] [SPACE] [DC] STORE [DC] [SPACE] [SPACE] [SPACE] ST 3 ⊗ [SPACE] [SPACE] [SPACE] [SPACE] [DC] MESSAGE [DC] ST TL ([SPACE]):Space key	#2614 *PGM2*  YOUR STORE MESSAGE

## ■ Programming of error messages PGM 2 2641

Your register has standard error messages shown in the following table. For more information about the alphanumeric characters programming, see section “2 How to program alphanumeric characters” under the chapter “PRIOR TO PROGRAMMING”.

### Procedure



\* Text no.: See “Error message table” shown below.

### Example

#### Key operation

2641 • ⊗  
1 ⊗  
ENTRY [SPACE] ERROR ST  
TL

#### Print

```
#2641 *PGM2*
01      ENTRY ERROR
```

## ■ Error message table

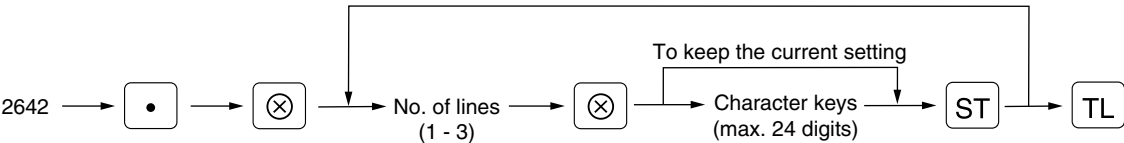
Text no.	Description	In default of programming
1	Registration error	ENTRY ERROR
2	Misoperation error	MISOPERATION
3	Desired code is not programmed yet.	NO RECORD
4	(Reserved)	
5	Secret code error	SECRET CODE
6	(Reserved)	
7	Memory is full.	MEMORY FULL
8	Insert slip paper.	INSERT SLIP
9	The entered cashier code is not authorized.	NO AUTHORITY
10	Stock is empty.	OUT OF STOCK
11	Compulsory pushing the subtotal key	SBTL COMPUL.
12	Compulsory tendering	TEND COMPUL.
13	Compulsory PBAL	PB COMPUL.
14-21	(Reserved)	
22	Overlapped cashier error	CASHIER ERR.
23	Cashier resetting over error	ENTRY ERR CA
24-26	(Reserved)	
27	Power off	POWER OFF
28-30	(Reserved)	
31	Compulsory non-add code	# COMPULSORY
32	The cashier/clerk is not assigned.	NOT ASSIGNED
33	(Reserved)	
34	Overflow limitation	OVER LIMIT.

Text no.	Description	In default of programming
35	The open price entry is inhibited.	INH. OPEN PR
36	The unit price entry is inhibited.	INH. UNIT PR
37	The direct non-tendering finalization after previous tender entry is inhibited.	NOT NON-TEND
38-66	(Reserved)	
67	REG buffer is full.	BUFFER FULL
68-71	(Reserved)	
72	EFT error	EFT ERROR
73	EFT connection is broken.	EFT BREAK
74-75	(Reserved)	
76	Closing the drawer is compulsory.	CLOSE DRAWER
77-80	(Reserved)	
81	Entry of secret code is needed.	ENTR SECRET#
82-83	(Reserved)	
84	Data backup send success	SEND OK
85	Data backup receive success	RECEIVE OK
86	Data backup communication error	COM. ERROR
87	Backup data format error	DATA ERROR
88	Data backup time out error	TIME OUT
89-94	(Reserved)	
95	EURO change compulsory	EURO CHANGE

■ **Programming of texts of validation printing** PGM 2 2642

You can program the texts (3 lines) to be printed on validation slip. Up to 24 characters can be programmed per line.

**Procedure**



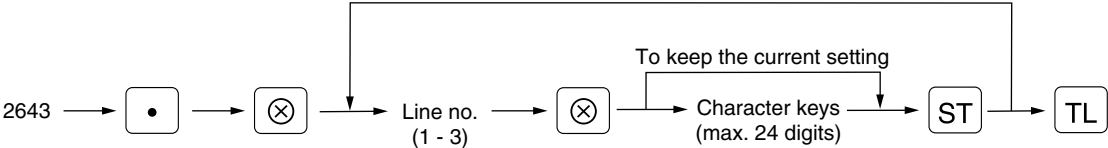
**Example**

Key operation	Print
2642 • ⊗ 3 ⊗ FOR [SPACE] DEPOSIT [SPACE] ONLY ST TL	#2642 *PGM2* FOR DEPOSIT ONLY

■ **Programming of texts of slip printing** PGM 2 2643

You can program the texts (3 lines) to be printed on slip. Up to 24 characters can be programmed per line.

**Procedure**



**Example**

Key operation	Print
2643 • ⊗ 1 ⊗ TEXT1 ST TL	#2643 *PGM2* TEXT1

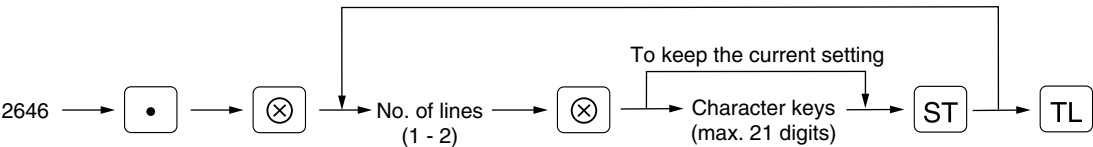
■ Programming of payee name (for English cheque)

PGM 2

2646

You can program payee name (2 lines) for English cheque to be printed on the cheque. Up to 21 characters can be programmed per line.

Procedure



Example

Key operation

2646

•

⊗

1

⊗

NAME1

ST

TL

Print

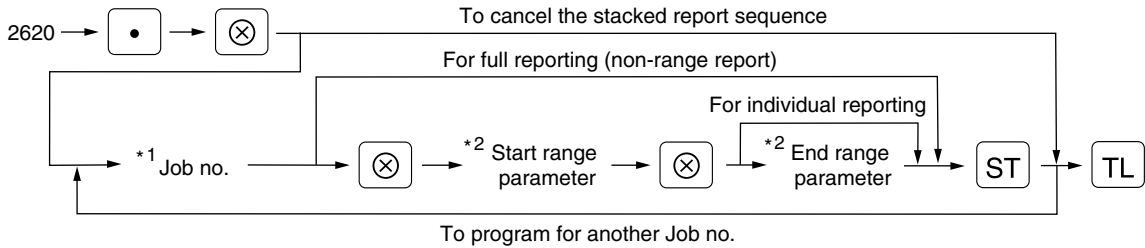
#2646 \*PGM2\*

NAME1

## ■ Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence **PGM 2 2620**

Your register is equipped with the stacked report printing function that enables multiple X/Z reports to be printed in sequence with only a single request.

### Procedure



### Note

- Maximum 70 steps are programmable. "1 step" means the memory size used for one no-range type job no. The range type job no. needs "8 steps".
- When Z of stacked report is initiated, X only reports will be skipped.

Job code numbers to be used are as follows.

*1: Job no.	Report name	*2: Start/End range parameter	Note
00	General		
10	Full department		
13	Full department group		
20	PLU	*3 Start PLU code/End PLU code (1 through 999999)	
24	PLU stock	*3 Start PLU code/End PLU code (1 through 999999)	
27	PLU zero sales		
29	PLU price category	*3 Start price amount/End price amount	
30	Transaction		
31	Total in drawer		
32	Commission sales		
40	Full clerk		
50	Full cashier		
60	Hourly sales information	*3 Start time/End time (0 through 2330)	Range report is available only in the X1 mode.
70	Daily net report		
80	PBLU report	*3 Start PLU code/End PLU code (1 through 9999)	
82	Balance report		

\*3: Both range setting and full setting are allowed.

### Example

#### Key operation

2620 • ⊗  
10 ST  
13 ST  
TL

#### Print

```

#2620 *PGM2*

10
13
  
```

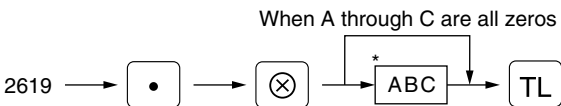
■ Setting the time range for hourly reports

PGM 2

2619

You can set the time range for an hourly report.

Procedure



- \*A: Time range  
To set the time range to 30 minutes (in the 24-hour system), enter 0.  
To set the time range to 60 minutes (in the 24-hour system), enter 1.
- BC: Starting time (hour = 00 to 23)

Example

Key operation

2619 [.] [X]  
107 [TL]

Print

#2619 \*PGM2\*

1 07

Note

To perform this setting, an hourly Z report (# 160) must be printed in advance.

■ Programming of power saving mode

PGM 2

2689

Procedure



* Item:	Selection:	Entry:
A	Entering power save mode when time is displayed.	Enable 0
		Disable 1
BCD	Time (min.) to entering power save mode since no operation is made.	1 through 254 (min.) (999: the power save mode is inhibited.)

Example

Key operation

2689 [.] [X]  
0030 [TL]

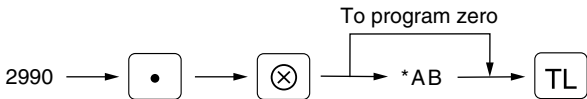
Print

#2689 \*PGM2\*

0 030



Procedure



\*AB: Printing density (00 – 99)  
00 = 80% for standard density  
50 = 90% for standard density  
99 = 100% for standard density

Example

Key operation

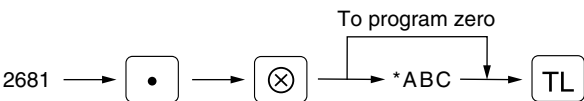
2990 [.] [⊗]  
50 [TL]

Print

#2990 \*PGM2\*  
  
50

Functional programming

Procedure



* Item:	Selection:	Entry:
A Automatic conversion of unit prices into EURO	Yes	0
	No	1
B The EURO change job at programmed date/time (#2682, 2683)	Compulsory	0
	Non-compulsory	1
C Fractional treatment of Exchange 1	Raising to unit	0
	Round off (4 - down, 5 - up)	1

Example

Key operation

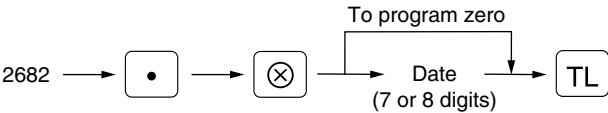
2681 [.] [⊗]  
010 [TL]

Print

#2681 \*PGM2\*  
  
010

Date/time of EURO change

Procedure



Example

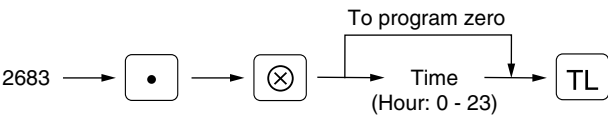
Key operation

2682 • ⊗  
26112003 TL

Print

#2682 \*PGM2\*  
26/11/2003

Procedure



Example

Key operation

2683 • ⊗  
23 TL

Print

#2683 \*PGM2\*  
23:00

■ RS-232C channel assignment

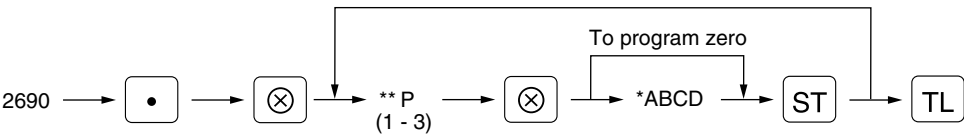
PGM 2

2690

Your register is equipped with two RS-232C interfaces. If you use the on-line communication function, the channel number of each RS-232C interface must be programmed by using the following procedure.

To activate the on-line communication, consult your dealer.

Procedure



\*\* P: 1

* Item:	Selection:	Entry:
A Channel no. for the ON-LINE communication	Not connected	0
	Standard channel 1	1
	Standard channel 2	2
B Always enter 0.		0
C Always enter 0.		0
D Always enter 0.		0

\*\* P: 2 (ABCD: Always enter 0.)

\*\* P: 3

* Item:	Selection:	Entry:
A Always enter 0.		0
B Channel no. for the slip printer	Not connected	0
	Standard channel 1	1
	Standard channel 2	2
C Always enter 0.		0
D Always enter 0.		0

- Note
- Never enter any number other than 0, 1 and 2.
  - EFT function always uses standard channel 2.
  - Data backup function always uses standard channel 1.

Example

Key operation

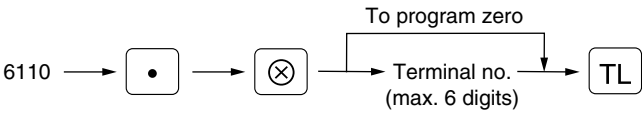
Print

2690 • ⊗  
3 ⊗ 0100 ST  
TL

#2690 \*PGM2\*  
3 0100

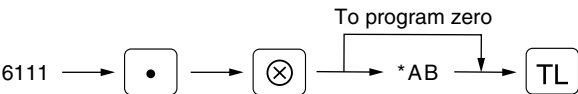
Terminal number

Procedure



Transmission line form

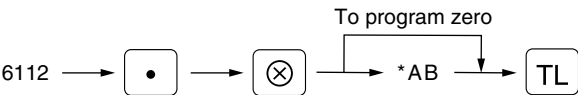
Procedure



* Item:	Selection:	Entry:
A Sensing of the CI signal	No	0
	Sensing	1
B Line form	Full duplex system	0
	Half duplex system	1

Functional programming

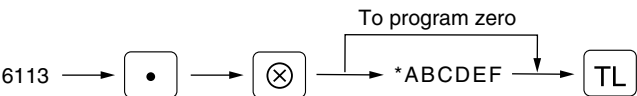
Procedure



* Item:	Selection:	Entry:
A Selection of print data sending/data sending and receiving	Data sending and receiving	0
	Print data sending	1
B Baud rate (38400/19200/9600/4800 bps) The selected baud rate is used for on-line communications and print data sending. It is not used for the data backup function.	4800 bps	4
	9600 bps	5
	19200 bps	6
	38400 bps	7

Start code and end code

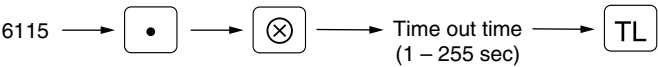
Procedure



\* ABC: Start code (000 – 127)  
DEF: End code (000 – 127)

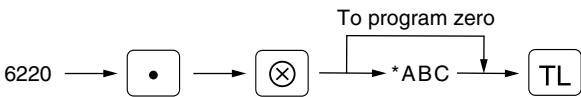
Time out time

Procedure



Programming for print data sending

Procedure



* Item:	Selection:	Entry:
A Sensing of DR signal	Yes	0
	No	1
B Sensing of CS signal	Yes	0
	No	1
C Sending of all print data	Disable	0
	Enable	1

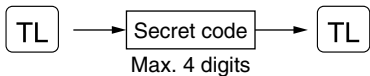
■ Secret codes to control access to PGM1 mode, X1/Z1 mode and X2/Z2 mode

PGM 2 2630 2631 2632

You must enter a secret code according to the following procedure before performing any PGM1-mode, X1/Z1-mode or X2/Z2-mode operation when a secret code has been set for that specific mode operation.

Operating

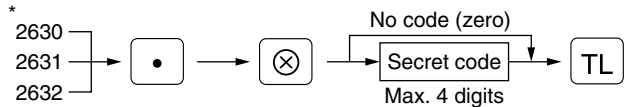
Procedure



**Note** Once a secret code is entered, it does not need to be entered again unless the mode switch setting is changed and any operation is performed.

Programming

Procedure



- \* 2630 for the PGM1 mode
- 2631 for the X1/Z1 mode
- 2632 for the X2/Z2 mode

Example

Key operation	Print
2631 [•] [⊗] 1234 [TL]	#2631 *PGM2*  1234

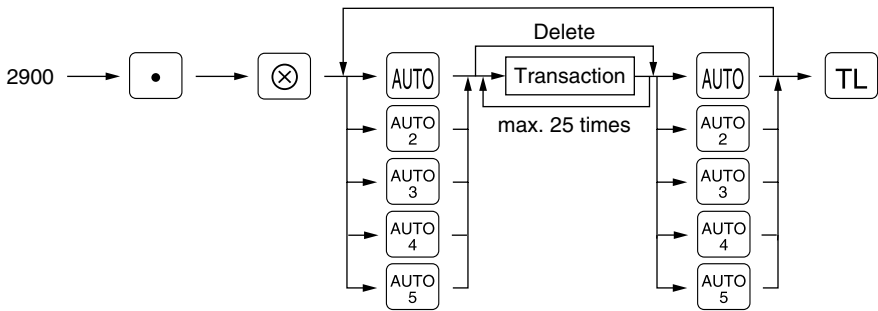
■ Setting the AUTO key — Automatic sequencing key —

X2/Z2

2900

If you program frequently performed transactions or report sequences for the AUTO keys, you can call those transactions and/or reports simply by pressing the corresponding AUTO keys in key operations. This programming can be done when your machine is in the X2/Z2 mode.

Procedure



Example

Programming for **AUTO** key and **AUTO 2** key as follows:  
**AUTO**; entering a PLU 2 item (programmed unit price: 1.50) and a dept. 6 item (unit price: 1.00)  
**AUTO 2**; selling a dept. 2 item (programmed unit price: 5.00) for cash

Key operation	Print
2900 . ×	#2900 *PGM2*
AUTO	#1
AUTO1 → 2 PLU/SUB 100 6	2 KEY
AUTO	PLU
AUTO 2	1 KEY
AUTO 2	0 KEY
2 TL	0 KEY
AUTO 2	D06
TL	#2 L1
	L1 D02
	TOTAL

Note

When the AUTO key has been programmed to execute a report job function etc., the mode switch must be in the corresponding position (X1/Z1 or X2/Z2).

## 11 TRAINING mode

The training mode is used when the operator or the manager practices register operations.

When a cashier set in training is selected, the machine automatically enters the training mode. When a cashier not set in training is selected, the machine automatically enters the ordinary REG mode. (For programming of training cashier, consult your local dealer.)

The training operations is valid only in REG, MGR, and VOID mode.

The cashier memory is updated in the training mode. Other memories are not updated.

Key operation		Print
Selecting the cashier set in training	1000	<div>26/08/2003 10:48 1014 123456#1110 TOM 2111 NILS  **TRAINING** DPT. 06 *10.00 3x 24.00 DPT. 07 *72.00  CASH *82.00</div>
	3	













## 12 Reading stored programs

Your machine allows you to read every program stored in the PGM1 and PGM2 modes.

### ■ Program details and procedures for their reading

Program for:		Mode switch position	Job code no.	Procedure	Related job code nos.
1	Departments	PGM2 or PGM1	1100		1110, 2110, 2111, 2112, 2114, 2115, 2116
2	PLUs/ subdepartments	PGM2 or PGM1	1200		1200, 1210, 1211, 1220, 1221, 1222, 2210, 2211, 2214, 2215, 2230, 2231, 2232, 2235
3	Key nos. for departments and PLUs	PGM2	2119		2119, 2219
4	Link PLUs	PGM2	2220		2220
5	Set PLUs	PGM2	2221		2221
6	Mix-and-match table	PGM2	2250		2250, 2251, 2254
7	Cashiers	PGM2 or PGM1	1500		1500, 1514, 2510, 2511
8	Clerks	PGM2 or PGM1	1400		1400, 1414
9	Function preset 1	PGM2 or PGM1	1300		1310, 2311, 2312, 2313, 2314, 2315, 2316, 2320, 2321, 2322, 2334



Program for:		Mode switch position	Job code no.	Procedure	Related job code nos.
10	Function preset 2	PGM2	2600	→ 2600 →  → 	2614, 2615, 2616, 2617, 2619, 2620, 2630, 2631, 2632, 2680, 2681, 2682, 2683, 2689, 2690
11	Messages	PGM2	2640	→ 2640 →  → 	2641, 2642, 2643, 2646
12	Tax rates	PGM2	2700	→ 2700 →  → 	2711
13	Auto keys	PGM2	2900	→ 2900 →  → 	2900
14	Thermal printer	PGM2	2990	→ 2990 →  → 	2990
15	On-line preset	PGM2	6110	→ 6110 →  → 	6110, 6111, 6112, 6113, 6115, 6220

■ Sample printouts

1 Reading of programmed items for departments  
(Reading in the PGM1 and PGM2 modes)

26/08/2003 11:01 123456#1114		
Job code no.	#1100 *PGM2*	Mode switch position*
Range		
Dept. code	D01	01-20
Item label	FRUITS	10.00
	003	G01
	D02 T1 3	C1L95
	DPT. 02	0.00
	001	G02
	D03	COL18
	DPT. 03	0.00
	003	G01
	D04 T 23	COL18
	DPT. 04	0.00
	001	G01
		COL18
		HALO limit.
		Commission group
		Function programming
		0 0 3
		Type of unit price entry
		Type (SIF/SICS/Normal)
		Item validation
		Minus department
	D09	0.00
	DPT. 09	G01
	001	COL18
	D10	-0.00
	DPT. 10	G10
	001	COL18
	D11	0.00
	D20	0.00
	DPT. 20	G01
	001	COL18

2 Reading of programmed items for  
PLUs/subdepartments  
(Reading in the PGM1 and PGM2 modes)

26/08/2003 11:10 123456#1116		
Job code no.	#1200 *PGM2*	Mode switch position*
Range		
PLU code	000001-000020	Range
	P000001 (02)	/00
		1.25
		0.00
Item label	MILK	C1
	3	0.000
	P000002 (02)	/12
	T1	0.00
		0.00
		0.00
	PL000002	CO
	2	S 12.500
	P000003 (01)	/00
		0.00
		0.00
	PL000003	CO
	2	S 0.000
	P000004 (01)	/00
		0.00
		0.00
		Commission group
	P000018 (03)L	/00
	T1	0.00
		0.00
	PL000018	CO
	3	S 0.000
	P000019 (03)	/00
	T1	0.00
		0.00
		0.00
	PL000019	CO
	3	S 0.000
	P000020 (03)S	/00
	T1	0.00
		0.00
		0.00
	PL000020	CO
	3	S 0.000

\* When you take this report in the PGM1 mode, the PGM2 indication is replaced by a "PGM1".

**3 Reading of programmed key nos. for departments and PLUs**  
(Reading in the PGM2 mode)

26/08/2003 11:13 123456#1117		
#2119 *PGM2*		
001	L1	D01
002	L1	D02
003	L1	D03
004	L1	D04
005	L1	D05
006	L1	D06
007	L1	D07
008	L1	D08
009	L1	D09
010	L1	D10
011	L1	D11
012	L1	D12
013	L1	D13
014	L1	D14
015	L1	D15
016	L1	D16
017	L1	D17
018	L1	D18
019	L1	D19
020	L1	D20
021	L1	P000001
	L2	P000065
022	L1	P000002
023	L1	P000003
024	L1	P000004
025	L1	P000005
026	L1	P000006
027	L1	P000007
028	L1	P000008
029	L1	P000009
030	L1	P000010
031	L1	P000011
032	L1	P000012
033	L1	P000013
034	L1	P000014
117	L1	----
118	L1	----
119	L1	----

**4 Reading of programmed items for link PLUs**  
(Reading in the PGM2 mode)

26/08/2003 11:20 123456#1121		
#2220 *PGM2*		
P000018	000001-999999	Range
	LP000025	Linked PLU code
	P000026	
	P000027	

**5 Reading of programmed set PLUs**  
(Reading in the PGM2 mode)

26/08/2003 11:23 123456#1123		
#2221 *PGM2*		
P000020	000001-999999	
	SP000201	Tied PLU code
	P000202	

6 Reading of mix-and-match table  
(Reading in the PGM2 mode)

26/08/2003 12:06 123456#1130	
#2250 *PGM2*	
#01	
DISC1	-1.00/03
	P000010
	P000011
#02	
	-0.00/00
#03	
	-0.00/00
#04	
	-0.00/00
#05	
	-0.00/00
#06	
	-0.00/00
#07	
	-0.00/00
#08	
	-0.00/00
#09	
	-0.00/00
#10	
	-0.00/00

7 Reading of programmed items for cashiers  
(Reading in the PGM1 and PGM2 modes)

26/08/2003 12:07 123456#1131	
#1500 *PGM2*	
Cashier name	01CSR# MAYER
Cashier no.	0001-9999
	02CSR# CASHIER02
	0001-9999
	03CSR# CASHIER03
	0001-9999
	04CSR# TOM
	0001-9999
	1111
	000D1
	0002
	000D1
	0003
	000D1
	1014
	000D1
	20CSR# CASHIER20
	0001-9999
	0020
	000D1

\* When you take this report in the PGM1 mode, the PGM2 indication is replaced by a "PGM1".

8 Reading of programmed items for clerks  
(Reading in the PGM1 and PGM2 modes)

26/08/2003 12:07 123456#1132	
#1400 *PGM2*	
Clerk name	01CLK# NILS
Clerk no.	02CLK# CLERK02
	03CLK# CLERK03
	04CLK# BETH
	05CLK# CLERK05
	2111
	0002
	0003
	2014
	0005
	19CLK# CLERK19
	20CLK# CLERK20
	0019
	0020

\* When you take this report in the PGM1 mode, the PGM2 indication is replaced by a "PGM1".

9 Reading of programmed items for functions - 1  
(Reading in the PGM1 and PGM2 modes)

26/08/2003 12:20  
123456#1136

#1300 \*PGM2\*

F001 (-) 1	
I	-10.00
	L13
F002 (-) 2	
S	-0.00
	L18
F003 (-) 3	
S	-0.00
	L18
F004 (-) 4	
S	-0.00
	L18
F005 %1	
I	10.25%
	L 15.00%
F006 %2	
S	-0.00%
	L100.00%
F007 %3	
S	-0.00%
	L100.00%
F008 %4	
S	-0.00%
	L100.00%
F009 NET 1	
F010 DIFFER	
F011 TAX1 ST	
F012 TAX2 ST	
F013 TAX3 ST	
F014 TAX4 ST	
F015 VAT 1	
F016 VAT 2	
F017 VAT 3	
F018 VAT 4	
F019 TTL TAX	
F020 NET	
F021 VAT SFT	
F022 TAX DELE	
F023 NET2	
F024 SETPLU-	
F025 DISCOUNT	
F026 CP PLU	
F027 REFUND	

F028	IN	
F029	MODE	
F030	MGR	IN
F031	SBTL	IN
F032	HASH	IN
F033	HASH RF	
F034	VP CNT	
F035	BILL CNT	
F036	NO SALE	
F037	***PBAL	
F038	***NBAL	
F039	G.C. COPY CNT	
F040	GUEST	
F041	ORDER TL	
F042	PAID TL	
F043	AVE.	
F044	O-P	
F045	***RA	L19
F046	***RA2	L19
F047	***P0	L19
F048	***P02	L19
F049	CA/CHK	
		99.99
F050	DEPOSIT	L18
F051	DEPO. (-)	L18
F052	CASH	L18
		00000000
F053	CASH2	L18
		00000000
F054	CHECK1	L18
		00000000
F055	CHECK2	L18
		00000000
F056	CHECK3	L18
		00000000
F057	CHECK4	L18
		00000000
F058	CREDIT1	L18
		00000000
F059	CREDIT2	L18
		00000000
F060	CREDIT3	L15
		00000001
F061	CREDIT4	L18
		00000000
F062	EXCH1	*
	2	0.606800
F063	EXCH2	
	2	0.000000

F064	EXCH3	
	2	0.000000
F065	EXCH4	
	2	
F066	EX1 CHK	
F067	EX1 CR	
F068	DOM. CUR1	
F069	DOM. CUR2	
F070	DOM. CUR3	
F071	DOM. CUR4	
F072	DOM. CUR1	
F073	DOM. CUR1	
F074	****CID	
		9999999.99
F075	*CH ID	
F076	CA/CH ID	
F077	CHK/CG	
		999999.99
F078	GROUP01	
F079	GROUP02	
F080	GROUP03	
F081	GROUP04	
F082	GROUP05	
F083	GROUP06	
F084	GROUP07	
F085	GROUP08	
F086	GROUP09	
F087	*DEPT TL	
F088	DEPT (-)	
F089	*HASH TL	
F090	HASH (-)	
F091	*BTTL TL	
F092	BTTL (-)	
F093	COM. SAL1	
		0.00%
F094	COM. SAL2	
		0.00%
F095	COM. SAL3	
		0.00%
F096	COM. SAL4	
		0.00%
F097	COM. SAL5	
		0.00%
F098	COM. SAL6	
		0.00%
F099	COM. SAL7	
		0.00%
F100	COM. SAL8	
		0.00%
F101	COM. SAL9	
		0.00%
F102	NON COM.	
F103	COM. AMT1	

\* When you take this report in the PGM1 mode,  
the PGM2 indication is replaced by a "PGM1".

To be continued on the next page

10 Reading of programmed items for functions - 2  
(Reading in the PGM2 mode)

F104 COM. AMT2  
F105 COM. AMT3  
F106 COM. AMT4  
F107 COM. AMT5  
F108 COM. AMT6  
F109 COM. AMT7  
F110 COM. AMT8  
F111 COM. AMT9  
F112 COM. TTL  
F113 CA/CH IS  
F114 EXCH1 IS  
F115 EXCH2 IS  
F116 EXCH3 IS  
F117 CCD DIF.  
F118 DIF. TL  
F119 \*\*\*TOTAL  
F120 SUBTOTAL  
F121 OLD BAL.  
F122 BALANCE  
F123 DEPT  
F124 GROUP  
F125 PLU  
F126 SET PLU  
F127 STOCK  
F128 ZERO SALES  
F129 CATEGORY  
F130 TRANS.  
F131 TL-ID  
F132 SALES  
F133 CCD  
F134 CLERK  
F135 CASHIER  
F136 HOURLY  
F137 DAILY  
F138 BALANCE  
F139 PBLU  
F140 PBLU#  
F141 #  
F142 CHECK PR  
F143 PLU ST  
F144 ITEMS  
F145 MDSE ST  
F146 NET 1  
F147 NET 2  
F148 NET 3  
F149 NET 4  
F150 DIFF ST  
F151 DUE  
F152 CHANGE  
F153 COPY  
F154 G.C COPY  
F155 BILL  
F156 SLIP PR.  
F157 NEXT P.  
F158 TOWNNAMETOWN  
F159 NAME  
F160 EX1 CHG

26/08/2003 12:39  
123456#1137

#2600 \*PGM2\*

#2614

Logo message

**YOUR  
STORE  
MESSAGE**

#2615 00 99 1 0

Line feed for differ ST

#2616

01	00000000
02	00000000
03	00000010
04	00000000
05	00000000
06	00000000
07	00000000
08	00000000
09	00100000
10	00000000
11	00000000
12	00000000
13	00000000

Optional feature selection

#2617 030

Drawer open alarm time

#2619 1 07

Hourly report format/start hour

#2620

10

Stacked report

13

#2630 0000

#2631 1234

Secret code

#2632 0000

#2680 2

Drawer no. for the drawer for foreign currency

#2681 010

#2682 26/11/2003

#2683 23:00

#2689 0 030

Power saving mode

#2690

1 2000

2 0000

3 0100

RS-232C channel data

# 11 Reading of programmed messages (Reading in the PGM2 mode)

26/08/2003 12:40  
123456#1138

#2640 \*PGM2\*

#2641

01 ENTRY ERROR  
02 MISOPERATION  
03 NO RECORD  
04  
05 SECRET CODE  
06  
07 MEMORY FULL  
08 INSERT SLIP  
09 NO AUTHORITY  
10 OUT OF STOCK  
11 SRTL COMPUL.  
12 TEND COMPUL.  
13 PB COMPUL.  
14  
15  
16  
17  
18  
19  
20  
21  
22 CASHIER ERR.  
23 ENTRY ERR CA  
24  
25  
26  
27 POWER OFF  
28  
29  
30  
31 # COMPULSORY  
32 NOT ASSIGNED  
33  
34 OVER LIMIT.  
35 INH. OPEN PR  
36 INH. UNIT PR  
37 NOT NON-TEND  
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Error  
messages

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99  
#2642

BUFFER FULL

EFT ERROR  
EFT BREAK

CLOSE DRAWER

ENTR SECRET#

SEND OK  
RECEIVE OK  
COM.ERROR  
DATA ERROR  
TIME OUT

EURO CHANGE

FOR DEPOSIT ONLY  
#2643  
TEXT1

#2646  
NAME1

To be continued

12 Reading of programmed tax rates  
(Reading in the PGM2 mode)

26/08/2003 12:54 123456#1145	
#2700 *PGM2*	
TAX1	5.0000%
	0.12
TAX2	4.0000%
	0.12
TAX3	6.0000%
	0.20
TAX4	----

Tax rate  
Lowest taxable  
amount

14 Reading of programmed items for the thermal  
printer (Reading in the PGM2 mode)

26/08/2003 12:58 123456#1148	
#2990 *PGM2*	
	50
10 : 0123456789ABCDEF	
20 : 0123456789ABCDEF	
30 : 0123456789ABCDEF	
40 : 0123456789ABCDEF	
50 : 0123456789ABCDEF	
60 : 0123456789ABCDEF	
70 : 0123456789ABCDEF	
80 : 0123456789ABCDEF	
90 : 0123456789ABCDEF	

Printing density  
Entered Value  
Printing density  
example

13 Reading of programmed items for auto keys  
(Reading in the PGM2 mode)

26/08/2003 12:57 123456#1147	
#2900 *PGM2*	
#1	2 KEY PLU 1 KEY 0 KEY 0 KEY
L1	D06
#2	L1 D02 TOTAL
#3	----
#4	----
#5	----

15 Reading of ON-LINE preset  
(Reading in the PGM2 mode)

26/08/2003 12:59 123456#1150	
#6110 *PGM2*	
#6110	
TERMINAL NO.	000001
#6111	
MODEM CONTROL	00
#6112	
TYPE	0
BPS	6
#6113	
START CODE	002
END CODE	013
#6115	
TIME OUT	007
#6220	
PROGRAM	000



# READING (X) AND RESETTING (Z) OF SALES TOTALS

- Use the reading function (X) when you need to take a reading of sales information entered since the last resetting. You can take this reading any number of times. It does not affect the register's memory.
- Use the resetting function (Z) when you need to clear the register's memory. Resetting prints all sales information and clears the entire memory except for the GT1 through GT3 and training GT, reset count, and consecutive number.
- If you want to stop the printing report, turn the mode switch to the MGR position. The symbol ("\*\*\*\*\*") is printed.

## 1 Summary of reading (X) and resetting (Z) reports and the key operations to obtain the reports

X1 and Z1 reports: Daily sales reports

X2 and Z2 reports: Periodic (monthly) consolidation reports

Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
Flash report: (Only display) To clear the display, press the <b>CL</b> key or turn the mode switch to another position.	X1	—	—	Dept. key ( <b>1</b> to <b>99</b> ) Dept. code → <b>DEPT #</b> : Department total amount
				<b>⊗</b> key: Amount of cash in drawer
				<b>ST</b> key: Paid total
General report	X1, Z1	X1, Z1	100	Reading 100 → <b>•</b> → <b>⊗</b> → <b>TL</b> Resetting
		X2, Z2	200	200 → <b>•</b> → <b>⊗</b> → <b>TL</b> Resetting
Individual clerk report	X1, Z1	X1, Z1	141	Reading 141 → <b>•</b> → <b>⊗</b> → <b>TL</b> Resetting
		X2, Z2	241	241 → <b>•</b> → <b>⊗</b> → <b>TL</b> Resetting
	<OP X/Z> X, Z		41	41 → <b>•</b> → <b>⊗</b> → <b>TL</b> Reading Resetting
Individual cashier report	X1, Z1	X1, Z1	151	Reading 151 → <b>•</b> → <b>⊗</b> → <b>TL</b> Resetting
		X2, Z2	251	251 → <b>•</b> → <b>⊗</b> → <b>TL</b> Resetting
	<OP X/Z> X, Z		51	51 → <b>•</b> → <b>⊗</b> → <b>TL</b> Reading Resetting
Full clerk report	X1, Z1	X1, Z1	140	Reading 140 → <b>•</b> → <b>⊗</b> → <b>TL</b> Resetting
		X2, Z2	240	240 → <b>•</b> → <b>⊗</b> → <b>TL</b> Resetting
Full cashier report	X1, Z1	X1, Z1	150	Reading 150 → <b>•</b> → <b>⊗</b> → <b>TL</b> Resetting
		X2, Z2	250	250 → <b>•</b> → <b>⊗</b> → <b>TL</b> Resetting
Full department report	X1	X1	110	110 → <b>⊗</b> → <b>TL</b>
		X2	210	210 → <b>⊗</b> → <b>TL</b>
Individual group total report on department	X1	X1	112	112 → <b>⊗</b> → Group no. → <b>TL</b>
		X2	212	212 → <b>⊗</b> → Group no. → <b>TL</b>

Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
Full group total report on department	X1	X1	113	
		X2	213	
PLU/subdepartment report by designated range	X1, Z1	X1, Z1	120	
		X2, Z2	220	
PLU/subdepartment report by associated department	X1, Z1	X1, Z1	121	
		X2, Z2	221	
PLU/subdepartment zero sales report	X1	X1	127	
		X2	227	
PLU/subdepartment price category report	X1	X1	129	
		X2	229	
PLU/subdepartment stock report	X1		124	
PBLU report	X1, Z1		180	
PBLU report by cashier	X1, Z1		181	
Balance report	X1	X1	182	
		X2	282	



Item	Mode switch position		Job code	Key operation
	X1/Z1	X2/Z2		
Commission sales report	X1	X1	132	
		X2	232	
Transaction report	X1	X1	130	
		X2	230	
Total in drawer report	X1	X1	131	
		X2	231	
Hourly report	X1		160	 
	X1, Z1			
Stacked report	X1, Z1	X1, Z1	190	 When Z of stacked report is initiated, X only reports will be skipped.
		X2, Z2	290	
Daily net report		X2, Z2	270	

**Note**

Individual and full clerk reading and resetting are available only in the cashier and clerk system. In the factory setting, the register provides the "cashier only" system. So, if you want to change the system, consult your dealer.

## 2 Daily sales totals

### General report

You can take X and Z reports in the X1/Z1 mode. The use of the decimal key (.) determines when the report will actually reset the sales totals.

#### • Sample X report

28/08/2003 12:59 1111		
123456#2981 MAYER		
2111 NILS		
#100	*X1*	Report no.
TR	*00000000031.78	Read symbol
* DEPT *		
D02	141.000 Q	Dept. code
DPT. 02	*680.62	Sales q'ty
	86.85%	Sales amount
D15	8.000 Q	Ratio of dept.2 sales amount to group 1 total
DPT. 15	*103.08	
	13.15%	
GROUP01	149.000 Q	Group1 sales q'ty
	*783.70	Group1 sales amount
	7.55%	Ratio of dept. group1 sales amount to "+" department total
D03	153.000 Q	
DPT. 03	*2649.58	
D20 4.000 Q		
DPT. 20 *255.75		
58.60%		
GROUP08 13.000 Q		
*436.45		
4.21%		
D07 4.000 Q		
DPT. 07 *10.24		
100.00%		
GROUP09 4.000 Q		
*10.24		
0.10%		
*DEPT TL	614.000 Q	} "+" dept. counter and total
	*10373.48	
	100.00%	

To be continued on the next page

#### • Sample Z report

29/08/2003 22:05 1111		
123456#3065 MAYER		
2111 NILS		
#100	*Z1*	Reset symbol
	Z1 0002	Reset counter
GT1	*00000086222.98	Net grand total (GT2 - GT3)
GT2	*00000086376.09	Grand total of plus registration
GT3	-00000000153.11	Grand total of minus registration
BAL	*00000000065.38	
TR	*00000000165.00	Grand total of training mode registration

The subsequent printout occurs in the same format as in the X report.

#### Note

Not all reports provide the resetting capability. Please refer to the chart on pages 95 through 97.

<b>D10</b>	3.000 Q	
<b>DPT. 10</b>	-7.64	
<b>DEPT (-)</b>	3.000 Q	} "-" dept. counter and total
	-7.64	
<b>D11</b>	2.000 Q	
<b>DPT. 11</b>	*71.80	
<b>*HASH TL</b>	2.000 Q	} "+" hash dept. counter and total
	*71.80	
<b>D12</b>	8.000 Q	
<b>DPT. 12</b>	-68.48	
<b>HASH (-)</b>	8.000 Q	} "-" hash dept. counter and total
	-68.48	
<b>D13</b>	20.000 Q	
<b>DPT. 13</b>	*14.80	
<b>*BTTL TL</b>	20.000 Q	} "+" bottle return dept. counter and total
	*14.80	
<b>D14</b>	21.000 Q	
<b>DPT. 14</b>	-16.80	
<b>BTTL (-)</b>	21.000 Q	} "-" bottle return dept. counter and total
	-16.80	
<b>*TRANS. *</b>		
<b>(-) 3</b>	5 Q	} Subtotal ⊖3 counter and total
	-4.91	
<b>(-) 4</b>	6 Q	
	-4.08	
<b>SETPLU-</b>	-3.19	Set PLU discount total
<b>%1</b>	4 Q	} Subtotal percent 1 counter and total
	-35.75	
<b>%2</b>	4 Q	
	-66.80	
<b>NET 1</b>	*10249.11	Net sales total
<b>TAX1 ST</b>	*312.48	Taxable 1 total
<b>VAT 1</b>	*14.88	VAT 1 total
<b>TAX2 ST</b>	*261.98	
<b>VAT 2</b>	*10.08	
<b>TAX3 ST</b>	*258.91	
<b>VAT 3</b>	*14.66	
<b>TAX4 ST</b>	*149.26	
<b>VAT 4</b>	*9.76	
<b>TTL TAX</b>	*49.38	Tax total
<b>NET</b>	*10199.73	Net total without tax
<b>VAT SFT</b>	*36.51	VAT shift total
<b>TAX DELE</b>	*65.21	Tax delete total
<b>(-) 1</b>	5 Q	} Item ⊖1 counter and total
	-5.10	
<b>(-) 2</b>	6 Q	
	-4.73	

To be continued on the next page

<b>%3</b>	5 Q		
	-11.43	}	Item percent 3 counter and total
<b>%4</b>	8 Q		
	-12.12		
<b>DISCOUNT</b>	7 Q	}	Mix-and-match discount counter and total
	-8.40		
<b>CP PLU</b>	3 Q	}	Coupon PLU discount counter and total
	-6.39		
<b>REFUND</b>	2 Q	}	Refund counter and total
	*36.12		
<b>∅</b>	4 Q	}	REG-mode void counter and total
	*1001.62		
<b>∅ MODE</b>	2 Q	}	Void-mode transaction counter and total
	*38.95		
<b>MGR ∅</b>	4 Q	}	Manager item void counter and total
	*38.95		
<b>SBTL ∅</b>	1 Q	}	Subtotal void counter and total
	*25.63		
<b>HASH ∅</b>	1 Q	}	Hash dept. void counter and total
	*2.63		
<b>HASH RF</b>	1 Q	}	Hash refund counter and total
	*1.75		
<b>VP CNT</b>	0 Q	—	Validation print counter
<b>BILL CNT</b>	3 Q	—	Bill counter
<b>NO SALE</b>	3 Q	—	No-sale (exchange) counter
<b>***PBAL</b>	3 Q	—	PBAL counter
<b>***NBAL</b>	2 Q	—	NBAL counter
<b>G. C. COPY CNT</b>	2 Q	—	Gest check copy counter
<b>GUEST</b>	136 Q	—	Customer counter
<b>ORDER TL</b>	*10252.43	—	Order total
<b>PAID TL</b>	*10188.74	—	Paid total
<b>AVE.</b>	*74.92	—	Paid total average per costomer
<b>O—P</b>	*63.69	—	Order total – Paid total
<b>***RA</b>	4 Q		
	*212.00	}	Received on account 1 counter and total
<b>***RA2</b>	2 Q		
	*161.50		
<b>***PO</b>	2 Q		
	*33.00	}	Paid out 1 counter and total
<b>***PO2</b>	2 Q		
	*35.00		
<b>CA/CHK</b>	2 Q	}	Cheque cashing counter and total
	*120.00		
<b>DEPOSIT</b>	2 Q	}	Deposit (+) counter and total
	*100.00		
<b>DEPO. (-)</b>	2 Q	}	Deposit (-) counter and total
	-50.00		
<b>CASH</b>	95 Q		
	*8509.36	}	Cash counter and total
<b>CASH2</b>	4 Q		
	*131.54		
<b>CHECK1</b>	3 Q	}	Cheque 1 sales counter and total
	*101.08		

To be continued on the next page

CHECK2	3 Q	
	*89.47	
CHECK3	2 Q	
	*79.51	
CHECK4	3 Q	
	*100.27	
CREDIT1	6 Q	} Credit 1 sale and tendering counter and total
	*81.35	
CREDIT2	4 Q	
	*42.91	
CREDIT3	3 Q	
	*160.54	
CREDIT4	1 Q	
	*140.43	
EXCH1	4 Q	} Exchange 1 counter and total
	156.49	
DOM. CUR1	*257.84	— Exchange 1 in domestic currency
EX1 CHK	3 Q	} Exchange 1 cheque 1-4 counter and total
	111.58	
DOM. CUR1	*183.87	— Exchange 1 cheque 1-4 total in domestic currency
EX1 CR	2 Q	} Exchange 1 credit 1-4 counter and total
	60.94	
DOM. CUR1	*100.42	— Exchange 1 credit 1-4 total in domestic currency
EXCH2	2 Q	
	180.00	
DOM. CUR2	*119.79	
EXCH3	2 Q	
	50.00	
DOM. CUR3	*65.93	
EXCH4	1 Q	
	80.00	
DOM. CUR4	*51.53	
****CID	*8799.30	— Cash in drawer
*CH ID	*490.33	— Cheque in drawer
CA/CH ID	*9289.63	— Cash + cheque in drawer
CHK/CG	*43.49	— Change total for cheque tendering

■ **Cashier report**

Using this function, you can take X and Z reports for individual cashiers or all cashiers.

**Individual cashier reading and resetting**

**Note** The OP X/Z-mode reading and resetting is allowed only when your machine has been programmed for “OP X/Z mode available” in the PGM2 mode.

• **Sample X report**

28/08/2003 13:17	1111
123456#2986	MAYER
2111	NILS
#151 *X1*	
* CASHIER *	
01CSR#1111	MAYER
ORDER TL	*9051.38
PAID TL	*8985.34
AVE.	*77.46
O-P	*66.04
REFUND	3 Q
	*37.87
	5 Q
	*1004.25
MODE	2 Q
	*38.95
MGR	4 Q
	*38.95
SBTL	1 Q
	*25.63
***PBAL	3 Q
***NBAL	2 Q
G. C. COPY CNT	2 Q
GUEST	116 Q
***RA	4 Q
	*212.00
***RA2	2 Q
	*161.50
***P0	2 Q
	*33.00
***P02	2 Q
	*35.00
CA/CHK	2 Q
	*120.00
DEPOSIT	2 Q
	*100.00
DEPO. (-)	2 Q
	-50.00
CASH	75 Q
	*7305.96
CASH2	4 Q
	*131.54
CHECK1	3 Q
	*101.08
CHECK2	3 Q
	*89.47
CHECK3	2 Q
	*79.51

• **Sample Z report**

29/08/2003 22:09	1111
123456#3067	MAYER
2111	NILS
#151 *Z1*	
* CASHIER *	
01CSR#1111	MAYER

↓

The subsequent printout occurs in the same format as in the sample X report.

\* When you take these reports in the OP X/Z mode, the X report shows an “OP X” and the Z report shows an “OP Z”.



CHECK4	3 Q
	*100.27
CREDIT1	6 Q
	*81.35
CREDIT2	4 Q
	*42.91
CREDIT3	3 Q
	*160.54
CREDIT4	1 Q
	*140.43
EXCH1	4 Q
	156.49
DOM. CUR1	*257.84
EX1 CHK	3 Q
	111.58
DOM. CUR1	*183.87
EX1 CR	2 Q
	60.94
DOM. CUR1	*100.42
EXCH2	2 Q
	180.00
DOM. CUR2	*119.79
EXCH3	2 Q
	50.00
DOM. CUR3	*65.93
EXCH4	1 Q
	80.00
DOM. CUR4	*51.53
****CID	*7595.90
*CH ID	*490.33
CA/CH ID	*8086.23
CHK/CG	*43.49

#### Full cashier reading and resetting

29/08/2003 20:53 1111  
123456#3026 MAYER  
2111 NILS

#150 \*X1\*  
\* CASHIER \*

29/08/2003 22:11 1111  
123456#3069 MAYER  
2111 NILS

#150 \*Z1\*  
\* CASHIER \*

The subsequent printout occurs in the same format as in the sample reports of individual cashier reading and resetting, and sales data for cashiers print in this sequence.

■ Clerk report

Using this function, you can take X and Z reports for individual clerks or all clerks.

Individual clerk reading and resetting

**Note** The OP X/Z-mode reading and resetting is allowed only when your machine has been programmed for “OP X/Z mode available” in the PGM2 mode.

• Sample X report

28/08/2003 10:10 1111  
123456#2830 MAYER  
2111 NILS

#141 \*X1\*  
\* CLERK \*  
01CLK#2111 NILS  
ORDER TL \*1814.52  
COM. SAL1 \*134.14  
COM. AMT1 \*6.71  
COM. SAL2 \*134.16  
COM. AMT2 \*4.02

COM. SAL9 \*23.75  
COM. AMT9 \*1.19  
COM. TTL \*28.09  
NON COM. \*1018.51

Commission amount total  
Non-commission sales

Clerk no./clerk code  
Clerk name  
Order total  
(Net sales total)  
Commission 1  
(sales total)  
Commission 1  
(amount)

• Sample Z report

29/08/2003 22:13 1111  
123456#3070 MAYER  
2111 NILS

#141 \*Z1\*  
\* CLERK \*  
01CLK#2111 NILS

The subsequent printout occurs in the same format as in the sample X report.

Full clerk reading and resetting

29/08/2003 21:01 1111  
123456#3029 MAYER  
2111 NILS

#140 \*X1\*  
\* CLERK \*

29/08/2003 22:15 1111  
123456#3073 MAYER  
2111 NILS

#140 \*Z1\*  
\* CLERK \*

The subsequent printout occurs in the same format as in the reports of individual clerk reading and resetting, and sales data for clerks print in this sequence.

\* When you take these reports in the OP X/Z mode, the X report shows an “OP X” and the Z report shows an “OP Z”.

## ■ Hourly report

You can take X and Z reports for sales totals and transaction (customer) counters for 48 half hours, or 24 hours. If both quantity and amount are zero, their print is skipped.

### • Sample X report

31/08/2003 18:46	1111
123456#4531 MAYER	
2111 NILS	
#160 *X1*	
*HOURLY*	
10:00	47 Q
	*2740.18
AVE.	*58.30
10:30	55 Q
	*3130.10
AVE.	*56.91
SUBTOTAL	102 Q
	*5870.28
11:00	41 Q
	*1083.63
AVE.	*26.43
11:30	64 Q
	*3267.10
AVE.	*51.05
SUBTOTAL	105 Q
	*4350.73
12:00	55 Q
	*1940.20
AVE.	*35.28
12:30	80 Q
	*3925.85
AVE.	*49.07
SUBTOTAL	135 Q
	*5866.05

Customer counter  
Sales total  
Average sales  
amount per customer  
(sales total ÷  
customer counter)

17:30	63 Q
	*2390.35
AVE.	*37.94
SUBTOTAL	117 Q
	*5015.53
18:00	66 Q
	*3365.33
AVE.	*50.99
18:30	48 Q
	*3791.38
AVE.	*78.99
SUBTOTAL	114 Q
	*7156.71

### • Sample Z report

31/08/2003 18:51	1111
123456#4533 MAYER	
2111 NILS	
#160 *Z1*	
*HOURLY*	

The subsequent printout occurs in the same format as in the sample X report.

# ■ Full department report

29/08/2003 21:05 1111  
123456#3031 MAYER  
2111 NILS

#110 \*X1\*

\* DEPT \*

D02 291.000 Q

DPT.02 \*888.09

96.16%

D15 8.000 Q

DPT.15 \*35.50

3.84%

GROUP01 299.000 Q

\*923.59

5.09%

D03 197.000 Q

DPT.03 \*4586.17

98.31%

D16 9.000 Q

DPT.16 \*78.90

1.69%

GROUP02 206.000 Q

\*4665.07

25.69%

D01 296.000 Q

DPT.01 \*2133.74

97.92%

D17 7.000 Q

DPT.17 \*45.24

2.08%

GROUP03 303.000 Q

\*2178.98

12.00%

D06 24.000 Q

DPT.06 \*819.14

100.00%

GROUP04 24.000 Q

\*819.14

4.51%

D04 107.000 Q

DPT.04 \*3459.16

99.43%

D18 6.000 Q

DPT.18 \*20.00

0.57%

GROUP05 113.000 Q

\*3479.16

19.16%

Sales q'ty and total

Ratio of dept. 2 sales  
amount to group 1  
total

\*DEPT TL 1297.000 Q  
\*18155.71  
100.00%

D10 3.000 Q  
DPT.10 -4.31  
DEPT (-) 3.000 Q  
-4.31

D11 4.000 Q  
DPT.11 \*33.67  
\*HASH TL 4.000 Q  
\*33.67

D12 3.000 Q  
DPT.12 -3.66  
HASH (-) 3.000 Q  
-3.66

D13 14.000 Q  
DPT.13 \*10.22  
\*BTTL TL 14.000 Q  
\*10.22

D14 12.000 Q  
DPT.14 -7.20  
BTTL (-) 12.000 Q  
-7.20

SETPLU- -5.50

■ Individual group total report on department

29/08/2003 21:09 1111		
123456#3033 MAYER		
2111 NILS		
#112 *X1*		
* GROUP *		
D03	197.000 Q	
DPT. 03		*4586.17
D16	9.000 Q	
DPT. 16		*78.90
GROUP02	206.000 Q	
		*4665.07

} Group 2 sales q'ty and total

■ Full group total report on department

29/08/2003 21:11 1111		
123456#3034 MAYER		
2111 NILS		
#113 *X1*		
* GROUP *		
GROUP01	299.000 Q	
		*923.59
		5.09%
GROUP02	206.000 Q	
		*4665.07
		25.69%
GROUP03	303.000 Q	
		*2178.98

} Group 1 sales q'ty and total

*DEPT TL	1297.000 Q	
		*18155.71
		100.00%
DEPT (-)	3.000 Q	
		-4.31
*HASH TL	4.000 Q	
		*33.67
HASH (-)	3.000 Q	
		-3.66
*BTTL TL	14.000 Q	
		*10.22
BTTL (-)	12.000 Q	
		-7.20

■ **PLU/subdepartment report by designated range**

This function provides you with X and Z reports for sales information of a certain range of PLUs/subdepartments. You must enter the start and end PLU/subdepartment code of the range. Of course, the range may represent all of the PLUs/subdepartments in your register.

• **Sample X report**

29/08/2003 21:14 1111			
123456#3036 MAYER			
2111 NILS			
#120 *X1*			
* PLU *			
000001-000020			Range
PLU code	P000001	15.000 Q	Sales q'ty and total
Item label	PL000001	*31.50	
	L2	5.000 Q	
		*6.25	
	P000002	18.000 Q	
	PL000002	*71.13	
	L2	10.000 Q	
		*36.20	
	P000003	27.000 Q	
	PL000003	*69.38	
	L2	7.000 Q	
		*59.57	
	P000004	17.000 Q	
	PL000004	*87.93	
	L2	11.000 Q	
		*63.91	
	P000005	25.000 Q	
	PL000005	*153.90	
	L2	8.000 Q	
		*44.96	

	P000020	13.000 Q	
	PL000020	*99.04	
	L2	4.000 Q	
		*26.12	
	***TOTAL	228.000 Q	Range sum
		*1126.96	
	L2	57.000 Q	
		*312.01	
	SETPLU-	-5.50	
	* SET PLU *		
	P000010	5.000 Q	
	PL000010	*22.50	
	***TOTAL	5.000 Q	
		*22.50	
	L2	0.000 Q	
		*0.00	

• **Sample Z report**

29/08/2003 22:17 1111		
123456#3075 MAYER		
2111 NILS		
#120 *Z1*		
* PLU *		

The subsequent printout occurs in the same format as in the sample X report.

## ■ PLU/subdepartment report by associated department

### • Sample X report

28/08/2003 10:29 1111		
123456#2840 MAYER		
2111 NILS		
#121 *X1*		
* PLU *		
DPT. 05	D05	
P000003	3.000 Q	}
PL000003	*39.41	
L2	1.000 Q	}
	*9.56	
P000007	4.000 Q	}
PL000007	*99.02	
L2	2.000 Q	}
	*3.16	
***TOTAL	7.000 Q	}
	*138.43	
L2	3.000 Q	}
	*12.72	
SETPLU-	*2.31	
* SET PLU *		
***TOTAL	0.000 Q	}
	*0.00	
L2	0.000 Q	}
	*0.00	

### • Sample Z report

28/08/2003 10:54 1111		
123456#2844 MAYER		
2111 NILS		
#121 *Z1*		
* PLU *		

The subsequent printout occurs in the same format as in the sample X report.

## ■ PLU/subdepartment price category report

28/08/2003 10:32 1111		
123456#2843 MAYER		
2111 NILS		
#129 *X1*		
* CATEGORY *		
	0.00 - 9999.99	}
P000001		
PL000001		}
L1	2.000 Q	
	*14.98	}
L2	2.000 Q	
	*27.99	}
P000002		
PL000002		}
L1	2.000 Q	
	*37.92	}
L2	1.000 Q	
	*63.25	}

## ■ PLU/subdepartment zero sales report

29/08/2003 21:21 1111		
123456#3042 MAYER		
2111 NILS		
#127 *X1*		
* ZERO SALES *		
P000021		}
PL000021		
P000022		}
PL000022		
P000023		}
PL000023		

***TOTAL		
L1	90.000 Q	
		*1821.96
L2	33.000 Q	
		*343.88
* SET PLU *		
P000010		
PL000010		
L1	5.000 Q	
		*22.50
L2	2.000 Q	
		*7.81
***TOTAL		
L1	5.000 Q	
		*22.50
L2	2.000 Q	
		*7.81

■ **PLU/subdepartment stock report**

29/08/2003 21:25 1111		
123456#3045 MAYER		
2111 NILS		
#124 *X1*		
* STOCK *		
	000001-000010	Range
P000001		
PL000001	65.000 S	Current stock
P000002		
PL000002	41.000 S	
P000003		
PL000003	46.000 S	
P000004		
PL000004	32.000 S	
P000005		
PL000005	17.000 S	
P000006		
PL000006	28.000 S	
P000007		
PL000007	31.000 S	
P000008		
PL000008	37.000 S	
P000009		
PL000009	32.000 S	
P000010		
PL000010	0.000 S	

■ **PBLU report**

• Sample X report

28/08/2003 11:09 1111		
123456#2848 MAYER		
2111 NILS		
#180 *X1*		
* PBLU *		
	0001-9999	
1000#		
***PBAL	*21.27	
DEPOSIT	*50.00	
DEPO. (-)	-30.00	
***TOTAL		
***PBAL	*21.27	
DEPOSIT	*50.00	
DEPO. (-)	-30.00	

• Sample Z report

28/08/2003 11:13 1111		
123456#2854 MAYER		
2111 NILS		
#180 *Z1*		
* PBLU *		



The subsequent printout occurs in the same format as in the sample X report.



■ PBLU report by cashier

• Sample X report

28/08/2003 11:111111  
123456#2853 MAYER  
2111 NILS

#181 \*X1\*  
\* PBLU \*  
01CSR#1111 MAYER  
1000#  
\*\*\*PBAL \*21.27  
DEPOSIT \*50.00  
DEPO. (-) -30.00  
  
\*\*\*TOTAL  
\*\*\*PBAL \*21.27  
DEPOSIT \*50.00  
DEPO. (-) -30.00

• Sample Z report

28/08/2003 11:161111  
123456#2857 MAYER  
2111 NILS

#181 \*Z1\*  
\* PBLU \*

The subsequent printout occurs in the same format as in the sample X report.

■ Balance report

29/08/2003 21:271111  
123456#3046 MAYER  
2111 NILS

#182 \*X1\*  
\* BALANCE \*  
OLD BAL.  
  
ORDER TL \*18154.65  
PAID TL \*18079.27  
BALANCE \*65.38

Grand total balance  
of the previous day

Order total

Paid total

Old balance +  
today's balance

## ■ Commission sales report

28/08/2003 11:18	1111	
123456#2860	MAYER	
2111	NILS	
#132 *X1*		
* SALES *		
COM. SAL1	*171.72	Commission 1 (sales total)
COM. AMT1	*8.59	
COM. SAL2	*206.64	Commission 1 (amount)
COM. AMT2	*6.20	
COM. SAL3	*173.38	
COM. AMT3	*3.47	
COM. SAL4	*108.24	
COM. AMT4	*3.25	
COM. SAL5	*150.19	
COM. AMT5	*3.00	
COM. SAL6	*224.37	
COM. AMT6	*15.71	
COM. SAL7	*63.66	
COM. AMT7	*3.18	
COM. SAL8	*42.74	
COM. AMT8	*1.28	
COM. SAL9	*43.91	
COM. AMT9	*2.20	Commission amount total
COM. TTL	*46.88	
NON COM.	*1021.38	Non-commission sales
<b>NET 1</b>	<b>*2206.23</b>	Net sales total

## ■ Total in drawer reading

29/08/2003 21:30	1111	
123456#3052	MAYER	
2111	NILS	
#131 *X1*		
* TL-ID *		
EXCH1	2 Q	Exchange 1 counter
	130.00	
DOM. CUR1	*117.92	Currency exchange 1 total
EX1 CHK	1 Q	
	30.00	Domestic currency for currency exchange 1 total
DOM. CUR1	*27.20	
EX1 CR	1 Q	
	38.80	
DOM. CUR1	*35.20	
EXCH2	1 Q	
	50.00	
DOM. CUR2	*32.25	
EXCH3	1 Q	
	50.00	
DOM. CUR3	*82.38	
EXCH4	2 Q	
	150.00	
DOM. CUR4	*134.92	
****CID	*16971.89	Cash in drawer
*CH ID	*502.07	Cheque in drawer
CA/CH ID	*17473.96	Cash/Cheque in drawer
CHK/CG	*26.77	

## ■ Transaction report

29/08/2003 21:29	1111
123456#3050	MAYER
2111	NILS
#130 *X1*	
*TRANS. *	

In this report the same transaction data as those printed when full reading is taken are printed except department sales totals.

## ■ X1/Z1 stacked report

You can print multiple X1/Z1 reports in sequence at a time. In this case, you need to program in advance what X1/Z1 reports should be printed in the stacked report sequence.

### Note

The following job code numbers alone can be used for stacked report printing.

Job code number: 100, 110, 113, 120, 124, 127, 129, 130, 131, 132, 140, 150, 160, 180, 182

Refer to "Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence" for details.

### 3 Periodic consolidation

Your register allows you to take consolidation X and Z reports of a chosen period (normally one week or a month).

#### ■ Generality

The periodic reading or resetting reports are the same in format as those in the X1/Z1 report for daily total except job code no. (#2xx) and mode indication ("X2" or "Z2").

##### • Sample X report

```
30/08/2003 23:11 1111
123456#4111 MAYER
2111 NILS

#200 *X2*
TR *00000000165.00
```

Read symbol

##### • Sample Z report

```
30/08/2003 23:14 1111
123456#4115 MAYER
2111 NILS

#200 *Z2*
                Z1 0002
                Z2 0001
GT1 *00000086222.98
GT2 *00000086376.09
GT3 -00000000153.11
BAL *00000000065.38
TR  *00000000165.00
```

Reset symbol  
Reset counter of daily total  
Reset counter of periodic consolidation  
Grand total

The subsequent printouts are the same in format as those in the X/Z report for daily total.

■ Daily net report

• Sample X report

31/10/2003 23:32	1111
123456#8751 MAYER	
2111 NILS	
#270 *X2*	
* DAILY *	
01/10	49 Q
	*1041.39
02/10	78 Q
	*1813.20
03/10	158 Q
	*3468.67
04/10	190 Q
	*3715.31
05/10	196 Q
	*4280.99
30/10	115 Q
	*2438.19
31/10	126 Q
	*3022.19
***TOTAL	1891 Q
	*67299.84

• Sample Z report

01/11/2003 1:30	1111
123456#8811 MAYER	
2111 NILS	
#270 *Z2*	

↓  
The subsequent printout occurs in the same format as in the sample X report.

■ X2/Z2 stacked report

You can print multiple X2/Z2 reports in sequence at a time. In this case, you need to program in advance what X2/Z2 reports should be printed in the stacked report sequence.

**Note** The following job code numbers alone can be used for stacked report printing.  
Job code number: 200, 210, 213, 220, 227, 229, 230, 231, 232, 240, 250, 270, 282  
Refer to “Selection of X1/Z1 and X2/Z2 reports to be printed in the stacked report sequence” for details.

# COMPULSORY CASH/CHEQUE DECLARATION

If you want to make mandatory the declaration of the cash and cheque amount in the drawer before outputting cashier Z reports, consult your dealer and have your register programmed for compulsory cash/cheque declaration.

If your register is programmed for compulsory cash/cheque declaration (CCD), a cashier must first count and declare the cash and cheque amounts (of domestic and foreign currency) in the drawer, before he or she can output a cashier report. The procedure for outputting a CCD report is shown below.

## Types of compulsory cash/cheque declaration

- Compulsory declaration prior to individual cashier resetting
- Compulsory declaration prior to full cashier resetting

### Note

- Compulsory cash/cheque declaration is available in the above two types. You can choose either of these. Consult your dealer for details.
- When cash/cheque declaration is compulsory, flash reports are not available.

## Key operation

After the first **TL** key is pressed, the register prompts the cashier to input the cash and cheque accounts for both domestic and foreign currency. The cashier can simply input the total amounts of each currency unit, or the number of bills or coins of each denomination of each currency unit.

### Individual cashier report

OP X/Z mode



X1/Z1 mode

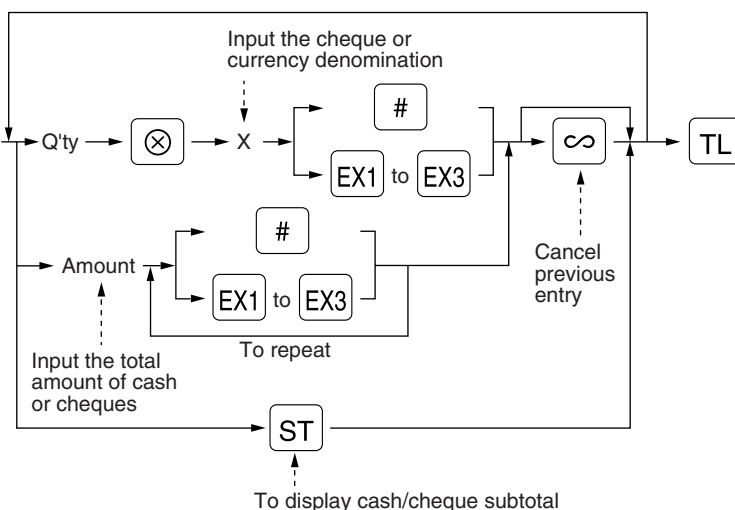


### Full cashier report

X1/Z1 mode



The drawer opens and the cashier is prompted to enter the cash and cheque amounts. ("CCD" is displayed.)



**#** :When inputting the cash or cheque amount (domestic currency) in the drawer

**EX1** to **EX3** :When inputting the amount of a foreign currency in the drawer

28/08/2003 13:59 1111  
123456#2990 MAYER  
2111 NILS

#151 \*Z1\*

\* CCD \*

CA/CH IS	*8086.23
EXCH1 IS	156.49
EXCH2 IS	180.00
EXCH3 IS	50.00

} CCD entry amount

\* CASHIER \*  
01CSR#1111 MAYER  
ORDER TL \*9051.38

CREDIT4	1 Q	*140.43
EXCH1	4 Q	156.49
EXCH1 IS		156.49
CCD DIF		0.00
DOM. CUR1		*257.84
EX1 CHK	3 Q	111.58
DOM. CUR1		*183.87
EX1 CR	2 Q	60.94
DOM. CUR1		*100.42
EXCH2	2 Q	180.00
EXCH2 IS		180.00
CCD DIF		0.00
DOM. CUR2		*119.79
EXCH3	2 Q	50.00
EXCH3 IS		50.00
CCD DIF		0.00
DOM. CUR3		*65.93
EXCH4	1 Q	80.00
DOM. CUR4		*51.53

— Currency exchange 1 cash in drawer to be obtained

— Total of entered (declared) exchange 1 in drawer

— Difference

****CID	*7595.90
*CH ID	*490.33
CA/CH ID	*8086.23
CA/CH IS	*8086.23
CCD DIF	*0.00
DIF. TL	*0.00
CHK/CG	*43.49

— Cash in drawer to be obtained

— Cheque (in domestic currency) in drawer to be obtained

— Cash/cheque in drawer to be obtained

— Total of entered (declared) cash/cheque in drawer

— Difference

— Total of difference

— Change total for cheque tendering

# PROGRAMMING FOR EURO

Your register can be modified to correspond with each period set for the introduction of EURO, and in your register each currency is treated as shown on the table below depending on which period you are in. Basically your register can be automatically modified to correspond to the introduction of EURO by executing the operation of Job #800 in X2/Z2 mode. However, there are several options you must set depending on your needs.

## How currencies are treated in your register

		Period 1	Period 2	Period 3
		After the introduction of EURO, and before EURO banknotes and coins begin to circulate	After EURO banknotes and coins begin to circulate, and before national currency is withdrawn from circulation. (Co-existence of EURO and national currency)	After the national currency is withdrawn from circulation
Currency	EURO	Exchange 1	Domestic currency	Domestic currency
	National currency (DM, F, etc.)	Domestic currency	Exchange 1	
	Foreign currency	Exchange 2 to Exchange 4	Exchange 2 to Exchange 4	Exchange 1 to Exchange 4

## Receipt samples:

Period 1

DPT. 01	*1.00
DPT. 02	*2.00
***TOTAL	<b>*3.00</b>
	€1.53
CASH	*5.00
CHANGE	*2.00
	€1.02

- Sales total amount in national currency (as domestic currency)
- Sales total amount in EURO\*
- Tendered amount in national currency
- Change in national currency
- Change in EURO\*

\*: They are printed for information purposes only.

Period 2

DPT. 01	€0.51
DPT. 02	€1.02
***TOTAL	<b>€1.53</b>
	*2.99
CASH	€2.00
CHANGE	€0.47
	*0.92

- Sales total amount in EURO (as domestic currency)
- Sales total amount in national currency\*
- Tendered amount in EURO
- Change in EURO
- Change in national currency\*

\*: They are printed for information purposes only.

Period 3

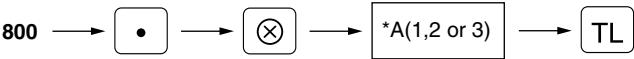
DPT. 01	€0.51
DPT. 02	€1.02
***TOTAL	<b>€1.53</b>
CASH	€2.00
CHANGE	€0.47

# ■ Automatic modification of register system for introduction of EURO

X2/Z2 800

To make your register correspond to the introduction of EURO, your register system can be automatically modified when the procedure shown below is executed in the X2/Z2 mode. According to the steps of the introduction, you can make your register correspond to EURO.

### Procedure



- \*A=1: Applicable for the period 1
- \*A=2: Applicable for the period 2
- \*A=3: Applicable for the period 3

### Note

• You can perform the each operation only once with the substitution of “A=1”, “A=2” and “A=3”. If you performed the operation with the substitution of “A=2” first, you cannot perform the operation with the substitution of “A=1”. If you performed the operation with the substitution of “A=3” first, you cannot perform the operation with the substitution of “A=1” and “A=2”.

The details of the register system modification are as follows:

#### When “1” is substituted to “A”:

1. Issuing a general Z1 report (Job #100)
2. Issuing a general Z2 report (Job #200)
3. Setting “Yes” for a PGM function “Printing exchange 1 total amount and change amount on receipt and journal” (Job #2616)
4. Setting “Division” for a PGM function “Exchange 1 calculation method” (Job #2616)
5. Setting the EURO symbol (€) for the currency description text (Job #2334), and setting “2” for the number of digits after decimal point (Job #2330) of exchange 1
6. Setting the round-off function enable for currency exchange

After the execution of the procedure with the substitution of “1”, treat EURO as foreign currency using Exchange 1 (EX1).

#### When “2” is substituted to “A”:

1. Issuing a general Z1 report (Job #100)
2. Issuing a general Z2 report (Job #200)
3. Resetting GT1, GT2, GT3 and training GT
4. Converting the unit prices of department and PLU to EURO currency.
5. Setting “Yes” for a PGM function “Printing exchange 1 total amount and change amount on receipt and journal” (Job #2616)
6. Setting “Multiplication” for a PGM function “Exchange 1 calculation method” (Job #2616)
7. Changing the domestic currency symbol to the EURO symbol (€) and setting the number of digits after decimal point of the domestic currency to 2
8. For the setting of the currency description text and the number of digits after decimal point of exchange 1, the ones that had been set to the domestic currency are set. (Job #2330 and #2334)
9. Setting the round-off function enable for currency exchange

### Note

When any special setting has been applied for the rounding system to make it suit your domestic (national) currency, the setting is cancelled to make it suit your new domestic currency, EURO.



After the execution of the procedure with the substitution of “2”, treat EURO as domestic currency, and national currency as foreign currency using Exchange 1 (EX1).

With the execution of the procedure with the substitution of “2”, your domestic currency becomes EURO. While unit prices of departments and PLUs are automatically converted to EURO currency, you must change the rates or amounts for the miscellaneous keys so that they are based on amounts in EURO.

**When “3” is substituted to “A”:**

1. Issuing a general Z1 report (Job #100)
2. Issuing a general Z2 report (Job #200)
3. Resetting GT1, GT2, GT3 and training GT
4. Converting the unit prices of department and PLU to EURO currency.
5. Setting “No” for a PGM function “Printing exchange 1 total amount and change amount on receipt and journal” (Job #2616)
6. Setting “Multiplication” for a PGM function “Exchange 1 calculation method” (Job#2616)
7. Changing the domestic currency symbol to the EURO symbol and setting the number of digits after decimal of the domestic currency to 2
8. Setting the round-off function enable for currency exchange

**Note**

*When the operation is performed from the status of substitution “1”, and when any special setting has been applied for the rounding system to make it suit your domestic (national) currency, the setting is cancelled to make it suit your new domestic currency, EURO.*

After the execution of the procedure with the substitution of “3”, treat EURO as domestic currency.

When the operation with the substitution of “2” has been performed already, “3. Resetting GT1, GT2, GT3 and training GT” and “4. Converting the unit prices of department and PLU to EURO currency” are not executed.

When the operation with the substitution of “1” or “2” has been performed already, the currency description text of exchange 1 is overwritten with a space.

**■ Optional programming for the introduction of EURO**

PGM 1

PGM 2

Programming relating with the function of exchange 1 (EX1) cannot be changed automatically with the execution of Job #800 described in the previous section. After the execution on each period, conduct the following programming depending on your needs.

**Programming for Exchange 1 (EX1)**

**Currency exchange rate (Job #1310)**

For the period 1 and period 2, set the EURO conversion rate.

**Cheque/credit operation (Job #2616)**

**Assigning the drawer number to the drawer for foreign currency (Job #2680)**

It may be convenient to have two drawers for EURO (as domestic currency) and national currency (as the foreign currency set in exchange 1) when both of these currencies are co-existing (period 2). In this case, conduct this programming.

# OVERVERRIDE ENTRIES

Programmed limit for functions (such as for maximum amounts) can be overridden by making an entry in the MGR mode.

## Procedure

1. Turn the mode switch to the MGR position.
2. Make an override entry.


## Example

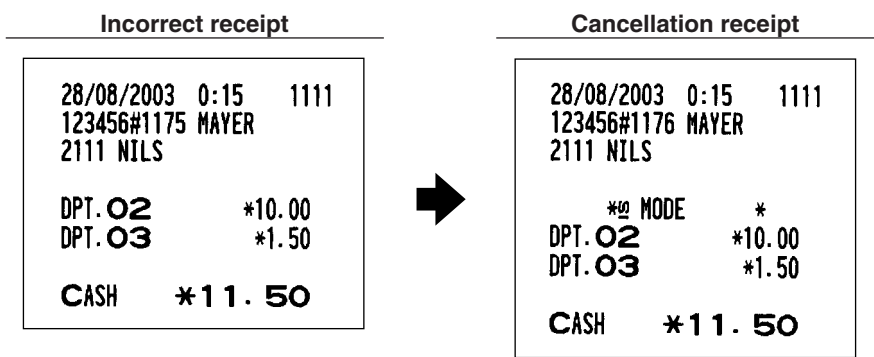
In this example, the register has been programmed not to allow deduction entries over 2.00.

Key operation		Print	
	1500 <input type="button" value="2"/>		
REG-mode	250 <input type="button" value="⊖"/> ...Error	DPT.02	*15.00
entries	<input type="button" value="CL"/>	(-) 1	-2.50
Turn the mode switch to the MGR position.		CASH	*12. 50
	250 <input type="button" value="⊖"/>		
Return the mode switch to the REG position.			
	<input type="button" value="TL"/>		

# CORRECTION AFTER FINALIZING A TRANSACTION (AFTER GENERATING A RECEIPT)

When you need to void incorrect entries that cashiers cannot correct (incorrect entries that are found after finalizing a transaction or cannot be corrected by direct or indirect void), follow this procedure in the MGR mode.

- 1. Turn the mode switch to the MGR position.
- 2. Press the  key to put your register in the VOID mode.
- 3. Repeat the entries that are recorded on an incorrect receipt. (All data for the incorrect receipt are removed from register memory; the voided amounts are added to the void register totalizer.)



Note

Your machine leaves the VOID mode whenever a transaction is cancelled (i.e. finalized in the VOID mode.) To void additional transactions repeat steps 2. and 3. above.

# PRIOR TO ENTRIES

## 1 Preparations for entries

Before registrations, insert the operator key into the mode switch and turn it to the REG position and check the following items:

### ■ Receipt and journal paper rolls

If the receipt and journal paper rolls are not set in the machine or there are low rolls, install new ones according to section "4. Installing and removing the paper rolls" under "OPERATOR MAINTENANCE."

### ■ Receipt ON/OFF function

You can disable receipt printing in the REG mode to save paper using the receipt function. To disable receipt printing, press the **RCPT** key in the OP X/Z position. This key toggles the receipt printing status ON and OFF. To check the receipt printing status, turn the mode switch to the OP X/Z position or press the **CL** key in the REG mode. When the function is in the OFF status, the receipt off indicator "\_" illuminates.

#### Note

*Your register will print reports regardless of the receipt state. This means that the receipt roll must be installed even when the receipt state is "OFF".*

### ■ Cashier and clerk assignment

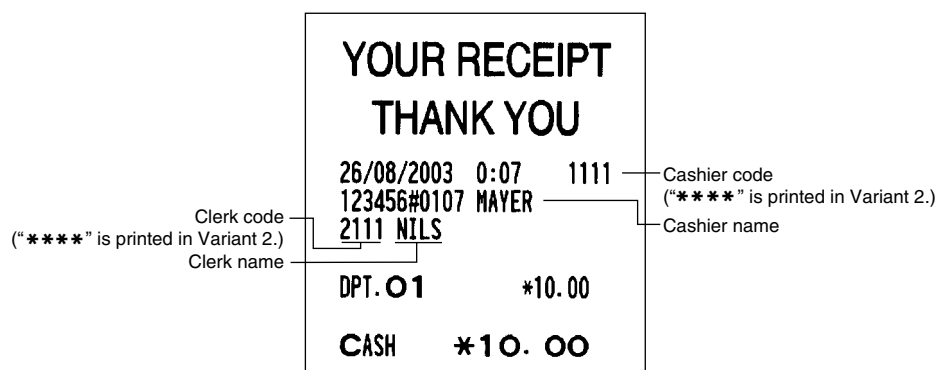
Prior to any item entries, cashiers must enter their cashier codes into the register, and may also be required to enter a clerk code. However, these code entries may not be necessary when the same cashier or clerk code is used in the next transaction.

Cashier codes and clerk codes are available in two variants: Variant 1, in which they are displayed ("0000" to "9999"), and Variant 2, in which they are not displayed (always "\*\*\*\*").

When the cashier or clerk code is assigned by the following procedure, the register prints the four-digit cashier code or clerk code (variant 2: "\*\*\*\*") and the cashier or clerk name both on the receipt and journal for every transaction.

#### Note

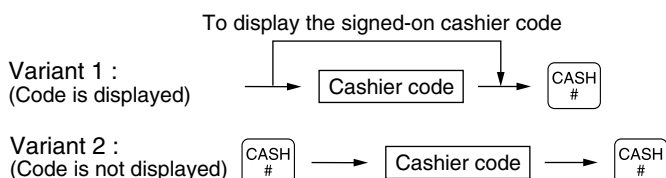
*All of these settings depend on how the register has been programmed. For the selection of these settings, consult your local dealer.*



## Procedure

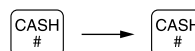
### Cashier assignment

#### ■ Sign-on



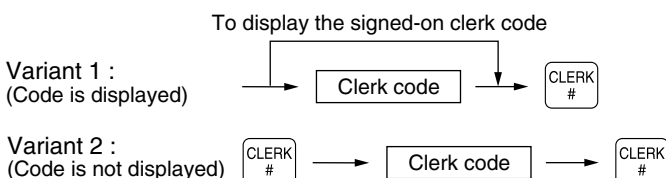
#### ■ Sign-off

Variant 1 / Variant 2 :



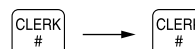
### Clerk assignment

#### ■ Sign-on



#### ■ Sign-off

Variant 1 / Variant 2 :



#### Note

- On the current factory setting, only the entry of the cashier code is required. When cashier & clerk codes entries are desirable for your register, consult your dealer.
- If you want to enter cashier and/or clerk codes before every transaction, consult your dealer.
- For the display type selection of cashier code and clerk code, "Variant 1" has been preset. For the selection of "Variant 2," consult your dealer.
- The cashier can be changed during a transaction. Consult your dealer.

### ■ Power saving mode

The register will enter into power saving mode when no entries are performed based on the pre-programmed time limit (by default, 30 minutes).

When the register goes to the power save mode, all display lights will turn off except the decimal point at the left most position of the lower line. The register will return to normal operation mode when any key is pressed or a mode is changed with the mode key. Please note when the register is recovered by a key entry, it is invalid. After the recovery, start the key entry from the beginning.

## 2 Error warning

In the following examples, your register will go into an error state accompanied with a warning beep and a corresponding error message. Clear the error state by pressing the **CL** key and take proper action. Please refer to the error message table on page 165.

- When you enter an over 32-digit number (entry limit overflow): Cancel the entry and re-enter a correct number.
- When you make an error in key operation: Clear the error and continue operation.
- When you make an entry beyond a programmed amount entry limit: Check to see if the entered amount is correct. If it is correct, it can be rung up in the MGR mode. Contact your manager.
- When an including-tax subtotal exceeds eight digits: Delete the subtotal by pressing the **CL** key and press the **TL**, **CA2**, **CH** through **CH4**, or **CR1** through **CR4** key to finalize the transaction.

# ENTRIES

## 1 Item entries

### Single item entries

#### Procedure

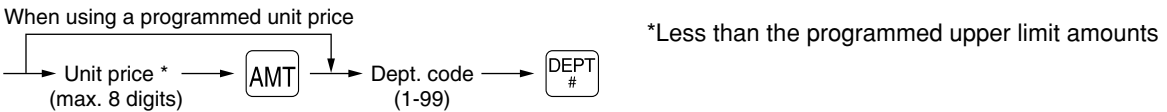
#### Department entries (direct department entries)

Enter a unit price and press a department key. If you use a programmed unit price, press a department key only.



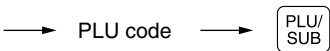
**Note** When those departments for which the unit price has been programmed as zero (0) are entered, only the sales quantity is added.

#### Department entries (indirect department entries)



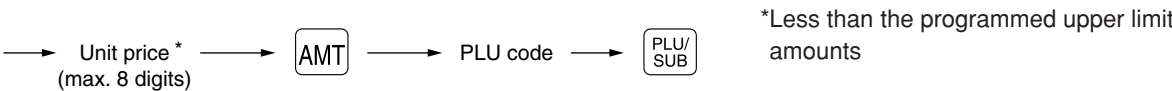
#### PLU entries (indirect PLU entries)

Enter a PLU code and press the  key.

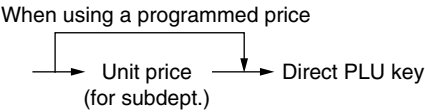


**Note** When those PLUs for which the unit price has been programmed as zero (0) are entered, only the sales quantity is added.

#### Subdepartment (open PLU) entries



#### PLU entries (direct PLU entries)



Example

Key operation

1200 3  
5  
8 DEPT #  
680 AMT 5 DEPT #  
2 PLU/ SUB  
1200 AMT 11 PLU/ SUB  
8  
TL

Print

DPT. 03 \*12.00  
DPT. 05 \*5.00  
DPT. 08 \*2.00  
DPT. 05 \*6.80  
PL000002 \*1.50  
PL000011 \*12.00  
PL000008 \*3.50  
  
CASH \*42.80

Repeat entries

You can use this function for entering a sale of two or more same items.

Example

Key operation

Repeated department entry (direct) { 200 8  
8  
8  
Repeated department entry (indirect) { 680 AMT 5 DEPT #  
DEPT #  
Repeated PLU entry (indirect) { 10 PLU/ SUB  
PLU/ SUB  
PLU/ SUB  
Repeated PLU entry (direct) { 51  
51  
Repeated subdepartment entry { 500 AMT  
60 PLU/ SUB  
PLU/ SUB  
TL

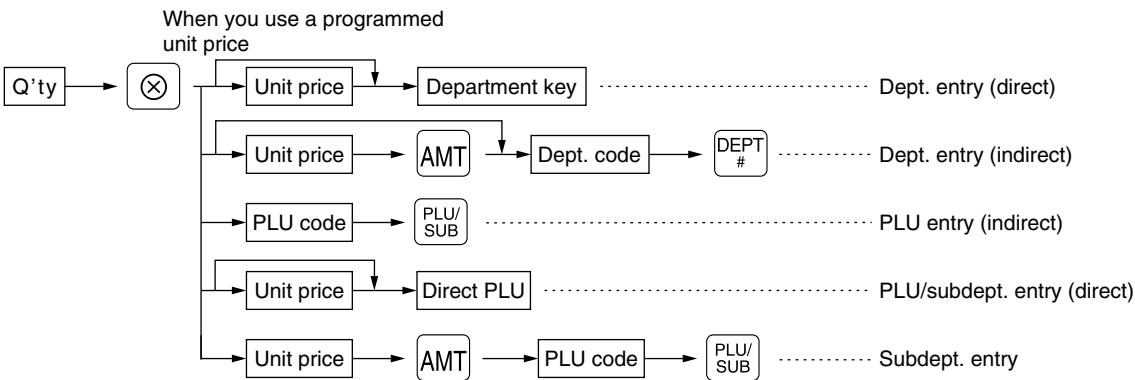
Print

DPT. 08 \*2.00  
DPT. 08 \*2.00  
DPT. 08 \*2.00  
DPT. 05 \*6.80  
DPT. 05 \*6.80  
PL000010 \*7.15  
PL000010 \*7.15  
PL000010 \*7.15  
PL000051 \*2.85  
PL000051 \*2.85  
PL000060 \*5.00  
PL000060 \*5.00  
  
CASH \*56.75

■ Multiplication entries

Use this feature when you need to enter two or more same items.  
This feature helps when you sell a large quantity of items or need to enter quantities that contain decimals.

Procedure



- Q'ty: Up to four digits integer + three digits decimal
- Unit price: Less than a programmed upper limit
- Q'ty x unit price: Up to eight digits

Example

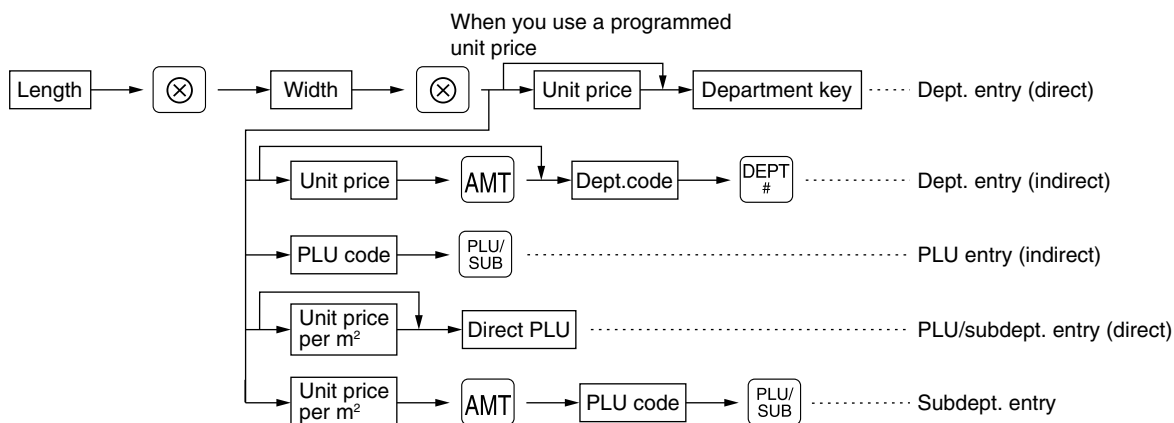
	Key operation	Print
Department entry (direct)	{ 7 . 5 ⊗ 165 8	7. 5x 1. 65 DPT. 08 *12. 38
Department entry (indirect)	{ 2 ⊗ 250 AMT 5 DEPT #	2x 2. 50 DPT. 05 *5. 00 15x 2. 10 PL000013 *31. 50
PLU entry	{ 15 ⊗ 13 PLU/SUB	8. 25x 3. 00 PL000058 *24. 75
Direct PLU entry	{ 8 . 25 ⊗ 58	3x 1. 00 PL000060 *3. 00
Subdepartment entry	{ 3 ⊗ 100 AMT 60 PLU/SUB TL	CASH *76. 63



## ■ Successive multiplication entries

This function is practical for example when you enter a sale of items sold by area (square meter).

### Procedure



- Length or width: up to seven digits (4-digit integer + 3-digit decimal)
- Unit price: less than a programmed upper limit
- Length x Width x Unit price: up to eight digits

### Note

For actual use of this function, consult your dealer.

### Example

#### Key operation

Department entry	{	3	⊗
		4	⊗
		400	5
PLU entry	{	1	• 5 ⊗
		2	• 5 ⊗
		8	PLU/SUB
Subdepartment entry	{	1	• 75 ⊗
		1	• 75 ⊗
		600	AMT
		6	PLU/SUB
			TL

#### Print

```

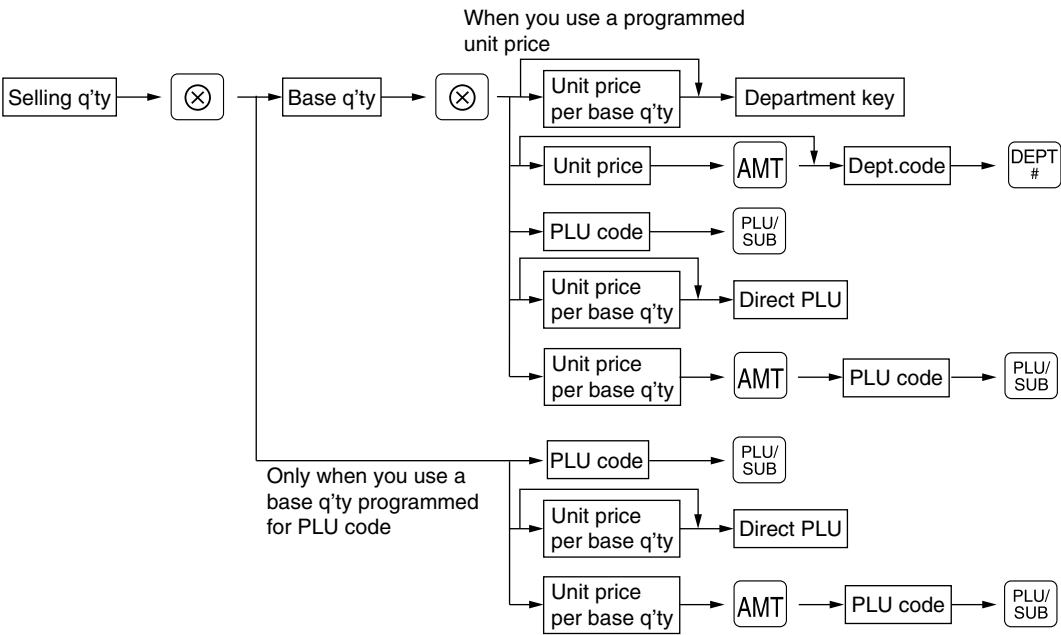
3x 4x 4.00
DPT. 05      *48.00
1.5x 2.5x 3.00
PL000008     *11.25
1.75x 1.75x 6.00
PL000006     *18.38

CASH      *77.63
  
```

■ Split-pricing entries

You will use this function when your customer wants to purchase items normally sold in bulk.

Procedure



- Selling quantity: Up to four digits integer + three digits decimal
- Base quantity: Up to two digits (integer)



**Note** For actual use of this function, consult your dealer.


Example

Key operation		Print
Department entry	7	<div>7x 10/ 6.00 DPT. 07           *4.20 8x 5/ 3.00 PL000035        *4.80  CASH            *9. 00</div>
	10	
	600	
PLU entry	8	
	5	
	35	
	TL	

■ **Single item cash sale (SICS)/single item finalize (SIF) entries**

**SICS entries**



- This function is useful when a sale is for only one item and is for cash; such as a pack of cigarettes. This function is applicable only to those departments that have been set for SICS or to their associated PLUs or subdepartments.
- The transaction is finalized and the drawer opens as soon as you press the department key,  key,  key or the direct PLU key.

Example	Key operation	Print
	250	
	For finishing —————> 	
	the transaction	
		<div><div>DPT. 09      *2. 50</div><div>CASH        *2. 50</div></div>

**Note** *If a ring-up to a department or PLU/subdepartment set for SICS follows the ones to departments or PLUs/subdepartments not set for SICS, it does not finalize and results in a normal sale.*

**SIF entries**

- If a ring-up to a department or PLU/subdepartment set for SIF follows the ones to departments or PLUs/subdepartments not set for SIF, the transaction is finalized immediately as a cash sale.
- Like the SICS function, this function is available for single-item cash settlement.

Example	Key operation	Print
	1745 	
	1500	
	For finishing —————> 	
	the transaction	
		<div><div>DPT. 08      *17. 45</div><div>DPT. 09      *15. 00</div><div>CASH        *32. 45</div></div>

## 2 Special entries for PLUs

### ■ PLU level shift (for direct PLU)

This shift can double or triple the number of PLUs on your register without adding additional direct PLU keys. You can use direct PLUs in three levels by utilizing shift keys **L1**, **L2**, and **L3**. These keys have the following functions.

**L1**: Shifts the PLU level from level 2 or 3 to level 1 (ordinary level).

**L2**: Shifts the PLU level from level 1 or 3 to level 2.

**L3**: Shifts the PLU level from level 1 or 2 to level 3.

You must program your machine in the PGM mode to select one of the two PLU level shift modes — automatic return mode\* and lock shift mode\*\* — and decide whether to allow PLU level shift in both the REG and MGR modes or in the MGR mode alone.

\* The automatic return mode automatically shifts the PLU level back to level 1 after a direct PLU key is pressed.

You can select whether the PLU level should return each time you enter one item or each time you finalize one transaction.

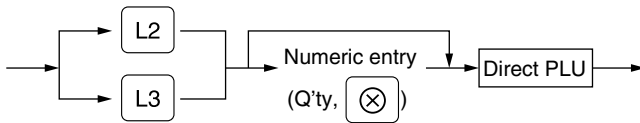
\*\* The lock shift mode holds the current PLU level until pressing of a PLU level shift key.

#### Automatic return mode

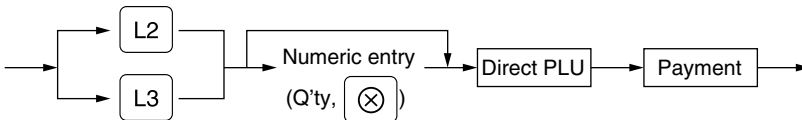
If you shift the PLU level in the automatic return mode, press a desired PLU level shift key before numeric entry.

##### Procedure

- each item



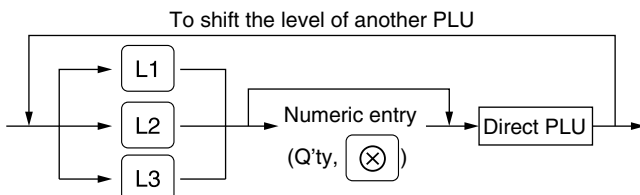
- each transaction



#### Lock shift mode

If you shift the PLU level in the lock shift mode, press a desired PLU level shift key before numeric entry.

##### Procedure



##### Note

If you select the automatic return mode, it is not necessary to use the **L1** key on the keyboard, but if you select the lock shift mode, it is necessary to use the key.

## Example

- When your machine has been programmed for the automatic return mode:

Key operation	Print
<div> <div>L2</div> <div>1</div> <div>1</div> <div>2</div> <div>1</div> <div>TL</div> </div>	<div> <div>PL000001 *1.25</div> <div>PL000065 *12.00</div> <div>PL000002 *1.50</div> <div>PL000001 *1.25</div> <div>CASH *16.00</div> </div>


- When your machine has been programmed for the lock shift mode:

Key operation	Print
<div> <div>L1</div> <div>1</div> <div>L2</div> <div>1</div> <div>2</div> <div>1</div> <div>TL</div> </div>	<div> <div>PL000001 *1.25</div> <div>PL000065 *12.00</div> <div>PL000066 *30.00</div> <div>PL000065 *12.00</div> <div>CASH *55.25</div> </div>

## ■ Price level shift

Two different price levels can be programmed for each PLU.

The price levels can be changed for PLU registrations.

You can shift the PLU price level (level 1 or 2) by utilizing the price level shift key (  ).

You must program a price level shift mode (i.e. automatic return mode\* or lock shift mode\*\*) and the operating mode to be used for the price level shift (i.e. both REG/MGR modes or MGR mode alone).

\* The automatic return mode automatically shifts the PLU price level back to level 1 after a PLU shift entry. You can select whether the price level should return each time you enter one item or each time you finalize one transaction.

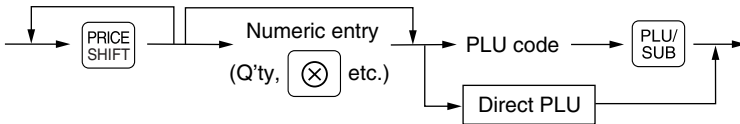
\*\* The lock shift mode holds the current PLU price level until pressing the price level shift key.

### Automatic return mode (for price level)

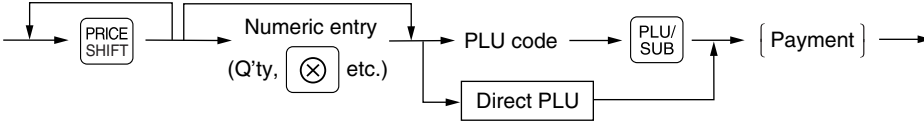
If your register has been programmed for the price level shift in the automatic return mode, press the price level shift key before a numeric entry.

#### Procedure

(each item)



(each transaction)

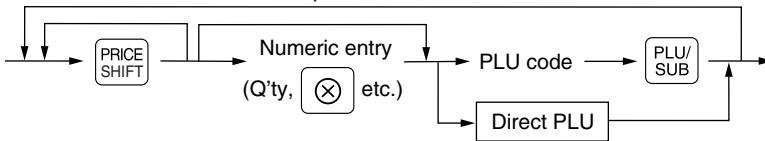


### Lock shift mode (for price level)

If your register has been programmed for the price level shift in the lock shift mode, press the price level shift key before a numeric entry.

#### Procedure

To shift the price level of another PLU



**Example**

PLU price level 1: PLU code 1 (@1.91), PLU code 2 (@0.79)

PLU price level 2: PLU code 1 (@2.00), PLU code 2 (@0.99)

- When your register has been programmed for the automatic return mode (by one item):

Key operation	Print
<div> <div>1</div> <div>PLU/ SUB</div> </div> <div> <div>PRICE SHIFT</div> <div>1</div> <div>PLU/ SUB</div> </div> <div> <div>2</div> <div>PLU/ SUB</div> </div> <div> <div>TL</div> </div>	<div> <div>PL000001</div> <div>*1.91</div> </div> <div> <div>PL000001</div> <div>*2.00</div> </div> <div> <div>PL000002</div> <div>*0.79</div> </div> <div> <div>CASH</div> <div><b>*4. 70</b></div> </div>

- When your register has been programmed for the lock shift mode:

Key operation	Print
<div> <div>1</div> <div>PLU/ SUB</div> </div> <div> <div>PRICE SHIFT</div> <div>1</div> <div>PLU/ SUB</div> </div> <div> <div>2</div> <div>PLU/ SUB</div> </div> <div> <div>TL</div> </div>	<div> <div>PL000001</div> <div>*1.91</div> </div> <div> <div>PL000001</div> <div>*2.00</div> </div> <div> <div>PL000002</div> <div>*0.99</div> </div> <div> <div>CASH</div> <div><b>*4. 90</b></div> </div>

## ■ Set PLU entries

Operation is the same as normal PLU's.

When a set PLU is entered, an entered or preset amount is printed as the unit price and then those PLUs linked to the set PLU are printed automatically.

**Example**

Key operation	Print
<div> <div>20</div> </div> <div> <div>TL</div> </div>	<div> <div>PL000020</div> <div>*2.50</div> </div> <div> <div>PL000201</div> </div> <div> <div>PL000202</div> </div> <div> <div>CASH</div> <div><b>*2. 50</b></div> </div>

**Note**

The unit price of the set PLU (ex. PLU 20) is the registered amount of the set PLU. The reduced amount of the unit price of the set PLU is subtracted from the total of the unit prices of linked PLUs and registered in the set PLU discount memory.

■ **Link PLU entries**

Operation is the same as normal PLU's. The action which is caused by the link PLU entry varies according to the PGM2 programming (#2616).

**Printing detailed information**

When a link PLU is entered, the linked PLUs' total amount and text and their individual amounts are printed automatically.

**Example**

Key operation	Print
<div>21</div> <div>TL</div>	<div><div>PL000021      *3.50</div><div>PL000025      *3.00</div><div>PL000026      *2.00</div><div>PL000027      *8.00</div><div>CASH      *16.50</div></div> <div><div>Link PLU</div><div>Linked PLUs</div></div>

**Printing text for the link PLU and total sales amount**

When a link PLU is entered, only the linked PLUs' text and the total sales amounts (the sum of prices for PLUs which are included in the link PLU) are printed.

**Example**

Key operation	Print
<div>21</div> <div>TL</div>	<div><div>PL000021      *16.50</div><div>CASH      *16.50</div></div> <div><div>Total amount</div><div>Link PLU text</div></div>

**Note** *If a discount entry is made for a link PLU, the discount amount is calculated based on the total sales amount. However, the discount amount is subtracted only from a price of a PLU whose text is printed on the receipt.*



## ■ Mix-and-match function

This function is convenient when selling same or different PLU items in a transaction and keeping a discount for them. Operation is the same as for normal PLUs. The mix-and-match table consists of the discount amount, the trip level for discount (satisfying count of entered item), and the text for a table. One table can be assigned max. 5 kinds of items. If the transaction that the mix-and-match item is registered is finalized, the sales amount may be discounted as follows:

Mix-and-match items of table no. 1 : Item-A (\*2.30), Item-B (\*3.10), Item-C (\*2.50)

Trip level for discount: 3

Discount amount: \*1.00





<Sale 1>	
Item-A	*2.30
Item-B	*3.10
Item-C	*2.50
<hr/>	
Subtotal	*7.90
Discount	-1.00
<hr/>	
Total	*6.90

<Sale 2>	
Item-C	*2.50
Item-C	*2.50
Item-C	*2.50
<hr/>	
Subtotal	*7.50
Discount	-1.00
<hr/>	
Total	*6.50

### Example

- In the case of <Sale 1> above

#### Key operation

(Treated as \*2.30 item) → 40   
 (Treated as \*3.10 item) → 41   
 (Treated as \*2.50 item) → 42   


#### Print

PL000040		*2.30
PL000041		*3.10
PL000042		*2.50
DISC1	1Q	-1.00
<b>CASH</b>		<b>*6.90</b>

### 3 Displaying and printing subtotals

Your machine provides the following two types of subtotals:

#### ■ Normal subtotal

This is a subtotal which is displayed and printed by pressing the **ST** key. When you press it, the subtotal of all entries which have been made is displayed.

##### Example

Key operation	Display	Print
100 <b>10</b>	DPT.10 1111 1.00	DPT. 10 *1.00
200 <b>11</b>	DPT.11 1111 2.00	DPT. 11 *2.00
700 <b>12</b>	DPT.12 1111 7.00	DPT. 12 *7.00
<b>ST</b>	SUBTOTAL 1111 10.00	SUBTOTAL *10.00
<b>TL</b>	CASH 1111 10.00	TAX1 ST *1.00
		VAT 1 *0.05
		NET 1 *0.95
		TAX2 ST *7.00
		VAT 2 *0.27
		NET 2 *6.73
		<b>CASH *10.00</b>

#### ■ Difference subtotal (Differ ST)

This is a subtotal which is printed by pressing the **DIFFER ST** key. You can get two or more difference subtotals in one transaction.

When you press it first, the subtotal of all entries which have been made is displayed and printed. If you press it second, you will get the subtotal of entries which have been made after you last got it. Taxes are calculated each time you press the **DIFFER ST** key, and taxes and taxable subtotals are printed on the receipt according to the job# 2616.

##### Example

Key operation	Display	Print
100 <b>10</b>	DPT.10 1111 1.00	DPT. 10 *1.00
200 <b>11</b>	DPT.11 1111 2.00	DPT. 11 *2.00
<b>DIFFER ST</b>	DIFF ST 1111 3.00	SUBTOTAL *3.00
700 <b>12</b>	DPT.12 1111 7.00	TAX1 ST *1.00
<b>TL</b>	CASH 1111 10.00	VAT 1 *0.05
		NET 1 *0.95
		DIFF ST *3.00
		DPT. 12 *7.00
		SUBTOTAL *7.00
		TAX2 ST *7.00
		VAT 2 *0.27
		NET 2 *6.73
		DIFF ST *7.00
		<b>CASH *10.00</b>

## 4 Finalization of transaction

### ■ Cash or cheque tendering

Press the **[ST]** key to get a subtotal, enter the amount tendered by your customer, then press the **[TL]** or **[CA2]** key if it is a cash tender or press one of the **[CH]** through **[CH4]** key if it is a cheque tender. When the amount tendered is greater than the amount of the sale, your register will show the change due amount and the text "CHANGE". Otherwise your register will show the text "DUE" and a deficit. Make a correct tender entry.

#### Example

##### Cash tendering

Key operation	Print
<div>} [ST] 1000 [TL]</div>	<div>***TOTAL *7. 35 CASH *10.00 CHANGE *2.65</div>

##### Cheque tendering

Key operation	Print
<div>} [ST] 1000 [CH]</div>	<div>***TOTAL *7. 35 CHECK1 *10.00 CHANGE *2.65</div>

### ■ Mixed tendering (cheque + cash)

#### Example

Key operation	Print
<div>} [ST] 1000 [CH] 500 [TL]</div>	<div>***TOTAL *14. 56 CHECK1 *10.00 CASH *5.00 CHANGE *0.44</div>

## ■ Cash or cheque sale that does not need any tender entry

Enter items and press the **TL** or **CA2** key if it is a cash sale or press one of the **CH** through **CH4** keys if it is a cheque sale. Your register will display the total sale amount.

### Example

#### Key operation

300 **6**  
10 **PLU/**  
**SUB**  
**TL**

#### Print

DPT.06 \*3.00  
PL000010 \*7.15  
  
CASH \*10.15

In the case of cheque sale

CHECK1 \*10.15

## ■ Credit sale

Enter items and press the corresponding credit keys.

### Example

#### Key operation

2500 **6**  
3250 **7**  
**CR2**

#### Print

DPT.06 \*25.00  
DPT.07 \*32.50  
  
CREDIT2 \*57.50

Amount tendering operations (i.e., change calculations) can be achieved by the **CR1** through **CR4** key when a PGM2 programming allows them.

## ■ Mixed-tender sale (cash or cheque tendering + credit tendering)

### Example

#### Key operation

}  
**ST**  
950 **TL**  
**CR2**

#### Print

\*\*\*TOTAL \*49.50  
CASH \*9.50  
CREDIT2 \*40.00

### Note

Press one of the **CH** through **CH4** keys or the **CR1** through **CR4** keys in place of the **TL** key when your customer makes payment in cheques or by credit account.

## 5 Computation of VAT (Value Added Tax)/tax

### ■ VAT/ tax system

The machine may be programmed for the following six tax systems by your dealer.

#### **Automatic VAT 1 - 4 system (Automatic operation method using programmed percentages)**

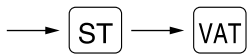
This system, at settlement, calculates VAT for taxable 1, taxable 2, taxable 3, and taxable 4 subtotals by using the corresponding programmed percentages.

#### **Automatic tax 1 - 4 system (Automatic operation method using programmed percentages)**

This system, at settlement, calculates taxes for taxable 1, taxable 2, taxable 3, and taxable 4 subtotals by using the corresponding programmed percentages, and also adds the calculated taxes to those subtotals, respectively.

#### **Manual VAT 1 - 4 system (Manual entry method using programmed percentages)**

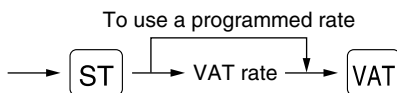
##### **Procedure**



This system provides the VAT calculation for taxable 1, taxable 2, taxable 3, and taxable 4 subtotals. This calculation is performed using the corresponding programmed percentages when the **VAT** key is pressed just after the **ST** key.

#### **Manual VAT 1 system (Manual entry method for subtotals that uses VAT 1 programmed percentages)**

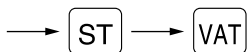
##### **Procedure**



This system enables the VAT calculation for the then subtotal. This calculation is performed using the VAT 1 programmed percentages when the **VAT** key is pressed just after the **ST** key. For this system, the keyed-in tax rate can be used.

#### **Manual tax 1 - 4 system (Manual entry method using programmed percentages)**

##### **Procedure**



This system provides the tax calculation for taxable 1, taxable 2, taxable 3, and taxable 4 subtotals. This calculation is performed using the corresponding programmed percentages when the **VAT** key is pressed just after the **ST** key.

After this calculation, you must finalize the transaction.

Automatic tax 2 - 4 and VAT1 system

This system enables the calculation in the combination with automatic tax 2 through 4 and VAT1. This combination can be any of tax 2 through 4 and VAT1. The tax amount is calculated automatically with the percentages previously programmed for these taxes.

Note

- A PLU not programmed for any of the tax statuses is registered depending on the tax status of the department which the PLU belongs to.
- VAT/tax assignment can be printed at the fixed right position near the amount on the receipt as follows:

VAT1/tax1 —————> A  
VAT2/tax2 —————> B  
VAT3/tax3 —————> C  
VAT4/tax4 —————> D

When the multiple VAT/tax is assigned to a department or a PLU, a smaller number of the VAT/tax will be printed. For details, contact your authorized SHARP dealer.

Example


Key operation		Print
(When the manual VAT 1- 4 system is selected)	550	<div><div>DPT. 08</div><div>SUBTOTAL</div><div>TAX1 ST</div><div>VAT 1</div><div>NET 1</div><div>CASH</div><div>*5. 50</div></div>
	8	
	ST	
	VAT	
	TL	

VAT shift entries


This feature is intended to shift the tax status of a particular department (or PLU) programmed for taxable 1 or taxable 1 and taxable 3.

- When the VAT shift entry is made for a particular department or PLU programmed for taxable 1, their tax status shifts to taxable 2.
- When this entry is made for a particular department (or PLU) programmed for taxable 1 and taxable 3, the tax status “taxable 1” remains unchanged, but the other, “taxable 3” is ignored.

Procedure

Press the  key to activate the VAT shift prior to entering department(s) or PLU(s) concerned.

Example

Key operation		Print
(When the manual VAT 1- 4 system is selected)	550	<div><div>DPT. 08</div><div>SUBTOTAL</div><div>TAX2 ST</div><div>VAT 2</div><div>NET 2</div><div>CASH</div><div>*5. 50</div></div>
		
	8	
	ST	
	VAT	
	TL	

## 6 Guest check (PBLU)

**PBLU system:** The previous balance is automatically loaded by entering a guest check code (= a PBLU code) when additional ordering occurs.

The details of the order are not stored in the previous balance lookup file (PB lookup file).

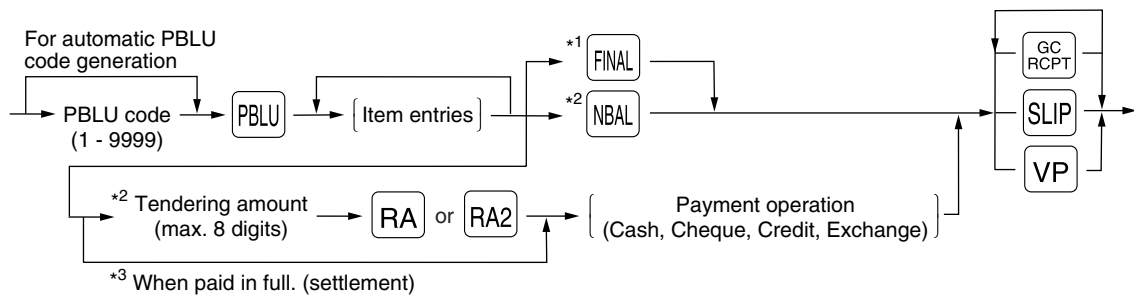
If you want to use this function, consult your dealer.

### ■ PBLU system

#### New guest

For a new guest, open a new guest check and assign a PBLU code.

#### Procedure



\*1 This is the optional function (Temporary finalization).

You can temporarily finalize a guest check by pressing the **FINAL** key. This prints out a guest check to show the current balance, including tax. The guest check, however, is still “open”. This means you can still make additional orders to it. The tax is calculated but is not added to the tax totalizer.

\*2 The tax is not calculated.

\*3 The tax is calculated and is added to the tax totalizer.

#### Example

#### Key operation

1001 **PBLU**  
1 **PLU/  
SUB**  
2 **PLU/  
SUB**  
**NBAL**

#### Print

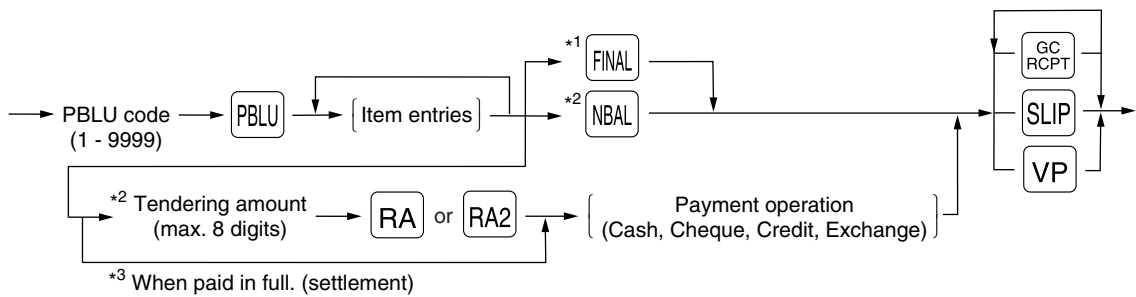
```

PBLU#1001
***PBAL      *0.00
PL000001     *1.91
PL000002     *0.79
***NBAL      *2.70
  
```

Additional ordering

Use the following procedure.

Procedure



- \*1 This is the optional function (Temporary finalization).  
You can temporarily finalize a guest check by pressing the **FINAL** key. This prints out a guest check to show the current balance, including tax. The guest check, however, is still “open”. This means you can still make additional orders to it. The tax is calculated but is not added to the tax totalizer.
- \*2 The tax is not calculated.
- \*3 The tax is calculated and is added to the tax totalizer.

Example

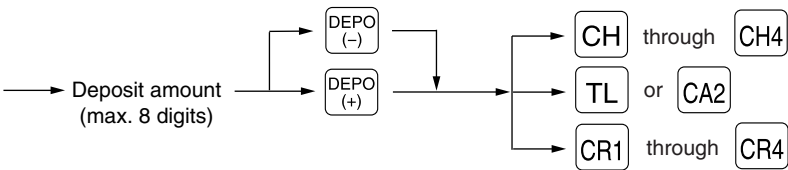
Key operation	Print
1001 <b>PBLU</b>	<div>PBLU#1 001</div>
7 <b>PLU/ SUB</b>	<div>***PBAL           *2. 70</div>
5 <b>PLU/ SUB</b>	<div>PL000007           *2. 50</div>
<b>TL</b>	<div>PL000005           *3. 70</div>
	<div>CASH            *8. 90</div>



■ Deposit entries

Deposit refers to a prepayment on a guest check. It can be received in cash, by cheque or credit.  
You can make a deposit entry only when entering a PBLU code. It cannot be done during handling of a tendered amount.  
A received deposit can be refunded by pressing the **DEPO (-)** key. You cannot attempt to refund an amount larger than the deposit balance.

Procedure



Example

Key operation	Print
1001 <b>PBLU</b>	<b>PBLU#1001</b>
5000 <b>DEPO (+)</b>	<b>***PBAL</b> *0.00
<b>TL</b>	<b>CASH</b>
<b>NBAL</b>	<b>DEPOSIT</b> *50.00
	<b>***NBAL</b> -50.00

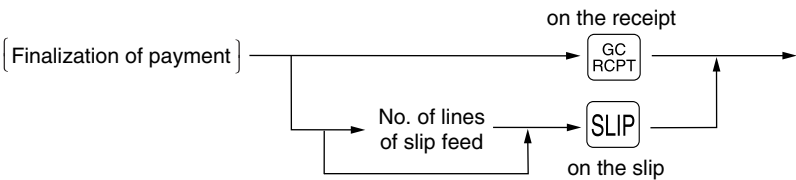
Example

Key operation	Print
1001 <b>PBLU</b>	<b>PBLU#1001</b>
5000 <b>DEPO (-)</b>	<b>***PBAL</b> -50.00
<b>TL</b>	<b>CASH</b>
<b>NBAL</b>	<b>DEPO. (-)</b> -50.00
	<b>***NBAL</b> *0.00

■ Bill printing

This function is used for issuing the bill to the guest. Your register can print the bill on the receipt or the slip. For selecting the slip printer, consult your dealer.

Procedure



Note

This function is available immediately after the finalization of transaction (including after pressing the **NBAL** or **FINAL** key).

Example

Key operation

1001 **PBLU**  
1000 **CR1**  
700 **TL**  
**GC RCPT**

Print

26/08/2003 1:40 1111  
123456#0146 MAYER  
2111 NILS  
  
PBLU#1001  
  
\*BILL \*  
\*\*\*PBAL \*17.00  
  
\*\*\*TOTAL \*17.00  
CREDIT1 \*10.00  
CASH \*7.00  
CHANGE \*0.00

## 7 Auxiliary entries

### ■ Percent calculations (premium or discount)

- Your register provides the percent calculation for the subtotal or each item entry depending on the programming.
- Percentage: 0.01 to 99.99%

#### Percent calculation for the subtotal

##### Example

##### Key operation

(When a discount of 10% is programmed for the  key)

4   
140   
225   
  
ST  
%  
TL

##### Print

```

4x 1.40
DPT. 05      *5.60
DPT. 07      *2.25
DPT. 07      *2.25
SUBTOTAL    *10.10
             -10.00%
%1           -1.01

CASH        *9. 09
    
```

#### Percent calculation for item entries

##### Example

##### Key operation

(When a premium of 15% is programmed for the  key)

800   
  
90   
7  5   
  
TL

##### Print

```

DPT. 06      *8.00
              15.00%
%2           *1.20
PL000090     *5.00
              7.5%
%2           *0.38

CASH        *14. 58
    
```

### ■ Deduction entries

Your register allows you to deduct a certain amount less than a programmed upper limit after the entry of an item or the computation of subtotal depending on the programming.

#### Deduction for the subtotal

##### Example

##### Key operation

575   
80   
  
100   
  
TL

##### Print

```

DPT. 06      *5.75
PL000080     *7.50
(-) 2        -1.00

CASH        *12. 25
    
```

Deduction for item entries

Example	Key operation	Print
	675 <input type="button" value="7"/> 75 <input type="button" value="⊖"/> <input type="button" value="TL"/>	<div>DPT.07            *6.75 (-) 1            -0.75  CASH            *6.00</div>

■ Refund entries

For a refund entry, press the  key just before you press a department key,  key, direct PLU key or  key. The operation before pressing the  key is the same as the one of normal operation. For example, if a refund item is the one entered into a department, enter the amount of the refund, then press the  key and the corresponding department key in this order; if an item entered into a PLU is returned, enter the corresponding PLU code, then press the  and  keys.

Example	Key operation	Print
	250 <input type="button" value="RF"/> <input type="button" value="6"/> 300 <input type="button" value="AMT"/> 5 <input type="button" value="RF"/> <input type="button" value="DEPT #"/> 7 <input type="button" value="⊗"/> 13 <input type="button" value="RF"/> <input type="button" value="PLU/SUB"/> <input type="button" value="TL"/>	<div>DPT.06            R-2.50 DPT.05            R-3.00 -7x 2.10 PL000013        R-14.70  CHANGE        *20.20</div>

■ Printing of non-add code numbers

Enter a non-add code number such as a customer's code number and credit card number within a maximum of 16 digits and press the  key at any point during the entry of a sale. Your register will print it at once, together with an 8-digit function text when so programmed.

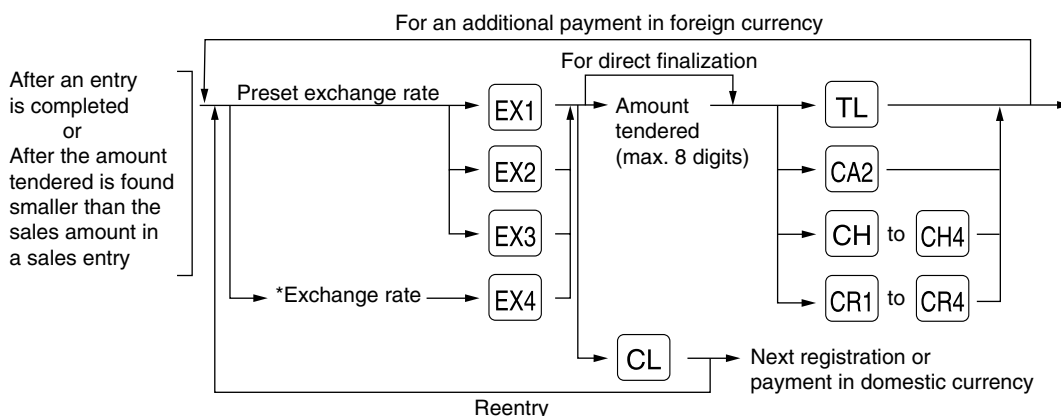
Example	Key operation	Print
	1230 <input type="button" value="#"/> 1500 <input type="button" value="6"/> <input type="button" value="CR1"/>	<div>#00000000000001230 DPT.06            *15.00  CREDIT1        *15.00</div>

## 8 Payment treatment

### ■ Currency exchange

Your register allows payment entries of foreign currency. Pressing one of the **EX1** through **EX4** keys creates a subtotal in foreign currency.

#### Procedure



\*Exchange rate: 0.000000 to 999.999999

#### Note

- When the amount tendered is short, the deficit is shown in domestic currency.
- Availability of credit and cheque tendering depends on the programming (#2616) (only for exchange 1).

#### Example

##### Preset exchange rate (1.550220) - EX2

##### Key operation

2300 **6**  
 4650 **7**  
 Currency exchange → **EX2**  
 Amount tendered in foreign currency → 15000 **TL**

##### Print

DPT. 06	*23.00	
DPT. 07	*46.50	
***TOTAL	*69.50	Domestic currency
EXCH2	1.550220	Exchange rate
	US \$107.74	Foreign currency
CASH CHANGE	US \$150.00	Foreign currency
	*27.26	Domestic currency

Currency description text

### Case opening foreign currency drawer:

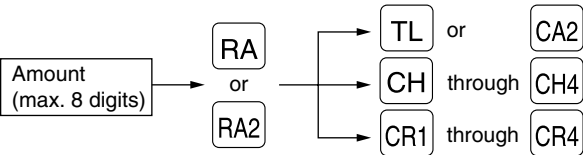
- At the timing of issuing receipt after tendering exchange amount
 

If you want to exchange displayed change amount in EURO/local currency, press the **EX1** key.  
 However, "Printing of the exchange 1 total amount and change amount" must be programmed "Yes" by job #2616.
- At the timing of issuing X/Z report (including CCD report)
- The **Exchange drawer open function** is executed.  
 When the EXCHANGE(n) key is pressed simply out of transaction, the foreign currency drawer will open and the "No sale" counter will count by one.

→ **EX1** through **EX4** →

Received on account entries

Procedure



Example

Key operation

12345 #  
4800 RA  
CH

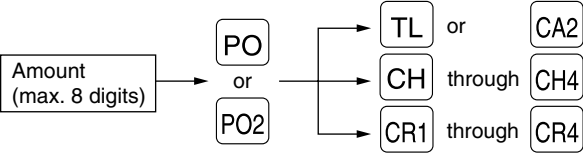
Print

#0000000000012345

CHECK1  
\*\*\*RA                   \*48.00

Paid out entries

Procedure



Example

Key operation

6789 #  
3000 PO  
CH

Print

#0000000000006789

CHECK1  
\*\*\*PO                   \*30.00

No sale (exchange)

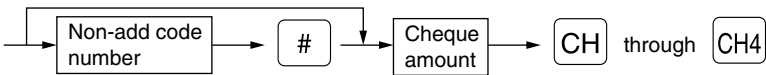
Simply press the **NS** key without any entry. The drawer will open and the printer will print "NO SALE" on both the journal and the receipt. If you let your machine print a non-add code number before pressing the **NS** key, a no sale entry is achieved with a non-add code number printed.

NO SALE

Cashing a cheque

Enter the cheque amount, then press one of the **CH** through **CH4** keys.

Procedure



Example

Key operation	Print
6789 [#] 3000 [CH]	#0000000000006789 CA/CHK *30.00

9 Automatic sequencing key (AUTO key) entries

You can achieve a programmed transaction simply by pressing a corresponding automatic sequencing key.

Example

( <b>AUTO</b> <sub>2</sub> ) = 500 [7] [TL]	
Key operation	Print
<b>AUTO</b> <sub>2</sub>	DPT.07 *5.00 CASH *5.00

# CORRECTION

## 1 Correction of the last entry (direct void)

If you make an incorrect entry relating to a department, PLU/subdepartment, percentage ( % through %4 ), deduction ( ⊖ through ⊖4 ) or refund, you can void this entry by pressing the ∞ key immediately after the incorrect entry.

Example	Key operation	Print
	1250 6 ∞	DPT. 06 *12. 50
	2 PLU/ SUB ∞	DPT. 06 ∞-12. 50
	600 8 %2 ∞	PL000002 *1. 50
	328 9	PL000002 ∞-1. 50
	28 ⊖ ∞	DPT. 08 *6. 00
	250 RF 6 ∞	15. 00%
		%2 *0. 90
		%2 ∞-0. 90
		DPT. 09 *3. 28
		(-) 1 -0. 28
		(-) 1 ∞*0. 28
		DPT. 06 R-2. 50
		DPT. 06 R∞*2. 50
		CASH *9. 28

## 2 Correction of the next-to-last or earlier entries (indirect void)

With the ∞ key, you can void any incorrect department, PLU/subdepartment or item refund entry made during a transaction if you find it before finalizing the transaction (e.g. pressing the TL key). This function is applicable to department, PLU/subdepartment and item refund entries only.

For the operation, press the ∞ key just before you press a department key, DEPT # key, direct PLU key or PLU/ SUB key. For the refund indirect void, press the ∞ key after you press the RF key.

Example	Key operation	Print
	1310 6	DPT. 06 *13. 10
	1755 7	DPT. 07 *17. 55
	10 PLU/ SUB 8	PL000010 *7. 15
	58 PLU/ SUB 7	PL000008 *3. 00
	825 7	PL000058 *3. 00
	1310 ∞ 6	DPT. 07 *8. 25
	∞ 8	DPT. 06 ∞-13. 10
	58 ∞ PLU/ SUB	PL000008 ∞-3. 00
	TL	PL000058 ∞-3. 00
		CASH *32. 95



### 3 Subtotal void

You can void an entire transaction. Once subtotal void is executed, the transaction is aborted and the register issues a receipt.

#### Example

#### Key operation

1310	<input type="button" value="2"/>
1755	<input type="button" value="6"/>
10	<input type="button" value="PLU/SUB"/>
35	<input type="button" value="PLU/SUB"/>
Subtotal void	<input type="button" value="ST"/>
	<input type="button" value="↺"/>
	<input type="button" value="ST"/>

#### Print

DPT. 02	*13.10
DPT. 06	*17.55
PL000010	*7.15
PL000035	*3.00
SUBTOTAL	*40.80
SBTL 0	-40.80
***TOTAL	*0.00

### 4 Correction of incorrect entries not handled by the direct or indirect void function

Any errors found after the entry of a transaction has been completed or during an amount tendered entry cannot be voided. These errors must be corrected by the manager.

The following steps should be taken:

1. If you are making the amount tendered entry, finalize the transaction.
2. Make correct entries from the beginning.
3. Hand the incorrect receipt to your manager for its cancellation.

# SPECIAL PRINTING FUNCTIONS

## 1 Copy receipt printing

If your customer wants a receipt after you have finalized a transaction with the receipt function being in the “OFF” status (no receipting), press the **RCPT** key. This will produce a receipt. Your register can also print a copy receipt when the receipt function is in the “ON” status. If you want to make a copy, please consult your dealer.

**Note** Pressing the **RCPT** key in the OP X/Z mode before registration toggles the status “ON” and “OFF”.

**Example** Printing a copy receipt after making the entries shown below with the receipt function being in the “OFF” status

Key operation	Print
850 <b>2</b>	<div>26/08/2003 2:46 1111 123456#0155 MAYER 2111 NILS DPT. 02 *8.50 3x 1.50 DPT. 01 *4.50 CASH *13.00</div>
3 <b>⊗</b>	
150 <b>1</b>	
<b>TL</b>	
Print on the journal	
For receipting→ <b>RCPT</b>	<div>26/08/2003 2:46 1111 123456#0155 MAYER 2111 NILS DPT. 02 *8.50 3x 1.50 DPT. 01 *4.50 CASH *13.00</div>
Print on the receipt	


When the receipt function is in the “ON” status and you press the **RCPT** key to make a second copy.

26/08/2003 2:46 1111  
123456#0155 MAYER  
2111 NILS  
  
\*COPY \*  
DPT. 02 \*8.50  
3x 1.50  
DPT. 01 \*4.50  
  
CASH \*13.00

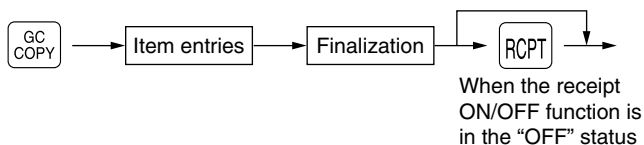
When the receipt function is in the “ON” status, the “\*COPY\*” symbol will be printed on the receipt.

## 2 Guest check copy

You can use this function when you want to take a copy of guest check.

Press the  key and make a desired entry.

### Procedure



### Note

The guest check copy has nothing to do with the memory.

### Example

#### Key operation

1480   

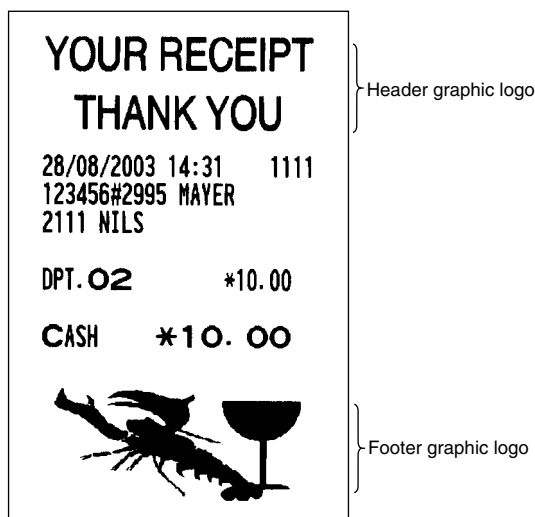
#### Print

\*G. C COPY \*  
DPT. 02 \*14.80  
CASH \*14.80

## 3 Printing of header and footer graphic logos

As a default setting, it is set to print a graphic logo on the top of each receipt (header graphic logo), and another graphic logo can be printed on the bottom of each receipt (footer graphic logo) with the job code #2616. You can also print the graphic logos with the combination of 3-line header logo message or 3-line footer logo message, or can print only logo message without graphic logo. Consult your dealer when you want to change the setting.

### • Sample receipt with a header graphic logo and a footer graphic logo



## 4 Validation printing function

Your register can perform validation printing when it is connected with the slip printer. For the details of slip printer, contact your authorized SHARP dealer.

1. Set a validation slip to the slip printer.
2. Press the **VP** key. The validation printing will start.

### Note

*Programmed compulsory validation printing can be overridden by performing the following operation. If you need this function, contact your authorized SHARP dealer.*

1. Move the mode key to the MGR position.
2. → **.** → **VP**

## 5 Printing of the employee's arrival and departure times

Your register can perform employee's arrival and departure time printing when it is connected with the slip printer. For the details of slip printer, contact your authorized SHARP dealer.  
For printing, you must be in the OP X/Z mode.

### Printing of arrival time

Cashier: → 1 → **VP**

Clerk: → 11 → **VP**  
(Only in cashier + clerk system)

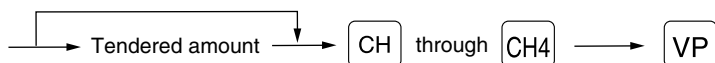
### Printing of departure time

Cashier: → 2 → **VP**

Clerk: → 22 → **VP**  
(Only in cashier + clerk system)

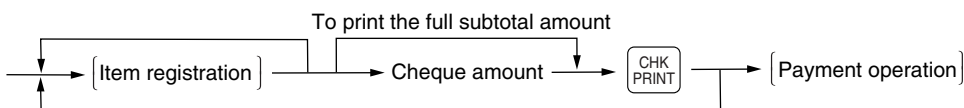
## 6 French EURO cheque printing

Your register can perform the French EURO cheque printing when it is connected with the slip printer. For the details of slip printer, contact your authorized SHARP dealer.



## 7 English cheque printing

Your register can perform the English cheque printing when it is connected with the slip printer. For the details of slip printer, contact your authorized SHARP dealer.



# OVERLAPPED CASHIER ENTRY

This function allows you to switch from one cashier to another and to interrupt the first cashier's entry. So the second cashier can do his or her entry in this mode. For actual use of this function, consult your dealer.

**Example**

Cashier 1: Entry started  
Cashier 2: Cashier change (1 to 2), interrupt initiated  
Cashier 2: Transaction finished (2)  
Cashier 1: Cashier change (2 to 1), entry restart

**Note**

- When the cashier and clerk system is applied to your register, you cannot operate the overlapped cashier entry.
- The overlapped cashier entry is not effective while the tendering sale is going on.
- If any cashier is still making an entry (or has not finalized the transaction yet), the machine does not run in any mode other than REG and MGR and can print no X/Z reports. The error message "CASHIER ERR." and the corresponding cashier code(s) are displayed at this time.

Key operation		Comments
1. Cashier 1 is assigned.	(1 <input type="text" value="CASH #"/> 100 <input type="text" value="1"/> 360 <input type="text" value="3"/> <input type="text" value="3"/>	The entry by cashier 1 is started.
2. Cashier 2 is assigned.	2 <input type="text" value="CASH #"/> 3 <input type="text" value="⊗"/> 150 <input type="text" value="2"/> <input type="text" value="TL"/>	The entry by cashier 2 is started. (The entry by cashier 1 is interrupted.)  The transaction by cashier 2 is finalized.
3. Cashier 1 is assigned.	1 <input type="text" value="CASH #"/> 100 <input type="text" value="1"/> 360 <input type="text" value="3"/> <input type="text" value="TL"/>	The entry by cashier 1 is restarted.  The transaction by cashier 1 is finalized.

# OPERATOR MAINTENANCE

## 1 In case of power failure

When power is lost, the machine retains its memory contents and all information on sales entries.

- When power failure is encountered in register idle state or during an entry, the machine returns to the normal state of operation after power recovery.
- When power failure is encountered during a printing cycle, the register prints “=====” and then carries out the correct printing procedure after power recovery. (See the sample print.)

DPT. 03	*10.00
NDT 25	*25.00
=====	
DPT. 05	*35.00
CASH	*45.00

## 2 In case of printer error

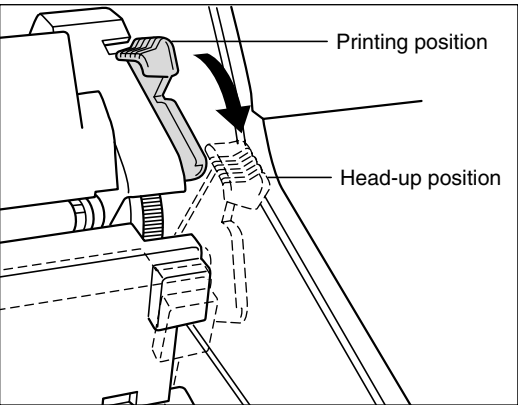
If the printer runs out of paper, the printer will stall, “PAPER EMPTY” will appear on the display, and the register will start to continuously produce an intermittent beeping tone. Key entries will not be accepted. Referring to “4. Installing and removing the paper roll” in this chapter, install a new roll paper in the proper position, then press the **CL** key. The printer will print the power failure symbol and resume printing.

If the print head comes up, the printer stalls, “HEAD UP” will appear on the display, and the register will start to continuously produce an intermittent beeping tone. Key entries will not be accepted. Bring back the print head to the correct position, then press the **CL** key. The printer will print the power failure symbol and resume printing.

## 3 Thermal printing

Your register prints by means of thermal printing. The print head applies heat to thermal paper which is chemically treated to change color when heated to a certain level. This creates the printed text.

### ■ Cautions in handling the printer



- If you are not going to use the register for an extended period of time, pull the print head release lever toward you so that the print head is set apart from the plate.



- Avoid the following environments:  
Dusty and humid places  
Direct sunlight  
Iron powder (A permanent magnet and electromagnet are used in this machine.)
- Use the print head release lever only when necessary.
- Never pull the paper when it is in contact with the print head. First release the head with the print head release lever, and then remove the paper.
- Never touch the surface of the print head.
- Never touch around the print head and the motor during printing or before they have had sufficient time to cool.

## ■ Cautions in handling the recording paper (thermal paper)

- Use only the paper specified by SHARP.
- Do not unpack the thermal paper until you are ready to use it.
- Avoid heat. The paper will color at around 70°C.
- Avoid dusty and humid places for storage. Avoid direct sunlight.
- The printed text on the paper can discolor under the following conditions:  
Exposure to high humidity and temperature  
Exposure to the direct sunlight  
Contact with glue, thinner or a freshly copied blueprint  
Heat caused by friction from scratching or other such means  
Contact with a rubber eraser or adhesive tape
- Be very careful when handling the thermal paper. If you want to keep a permanent record, copy the printed text with a photocopier.

## 4 Installing and removing the paper roll

### ■ Recording paper specifications

Be sure to use paper rolls specified by SHARP.

The use of any other paper rolls than specified could cause paper jamming, resulting in register malfunction.

#### Paper specification

Paper width:	44.5 ± 0.5 mm
Max. outside diameter:	80 mm
Quality:	Thermal paper
Paper tube:	18 mm

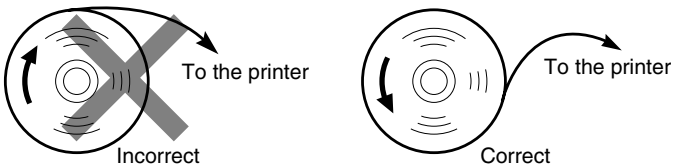
- Be sure to set paper roll(s) prior to using your machine, otherwise it may cause a malfunction.

Install the paper roll in the printer. Be careful then to set the roll and cut the paper end correctly.

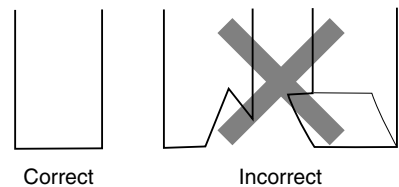
#### Note

*If the top end of the paper roll is fixed with paste or tape, the paper may lose its color development ability in the pasted or taped area due to the deterioration of the heat-sensitive color development component of the paper surface. This may result in nothing appearing at this location when printing is performed. Therefore, when setting a new paper roll in the machine, be sure to cut off approximately one revolution (approx. 25 cm long).*

#### (How to set the paper roll)

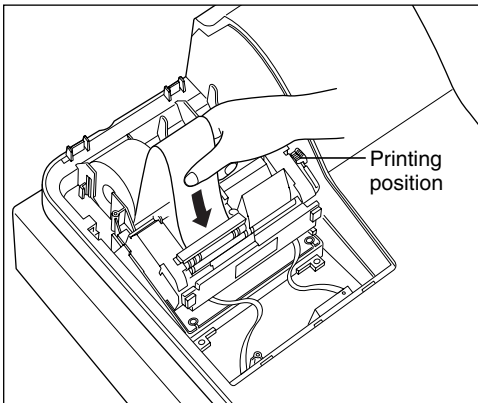


#### (How to cut the paper end)



### ■ Installing the paper roll

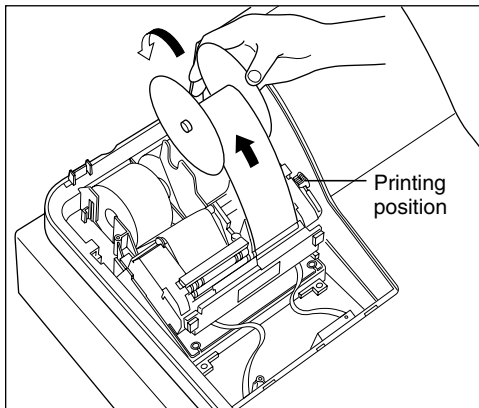
#### Installing the receipt paper roll




1. Turn the mode switch to the "REG" position with the AC cord connected.
2. Remove the printer cover.
3. Check that the print head release lever is in its printing position.
4. Set the paper correctly as illustrated above in the receipt side of the printer.
5. Insert the end of the paper into the paper chute as shown on the left. It will automatically be fed through the printer.
6. Cut off the excess paper that comes out of the printer with the manual cutter.
7. Replace the printer cover.



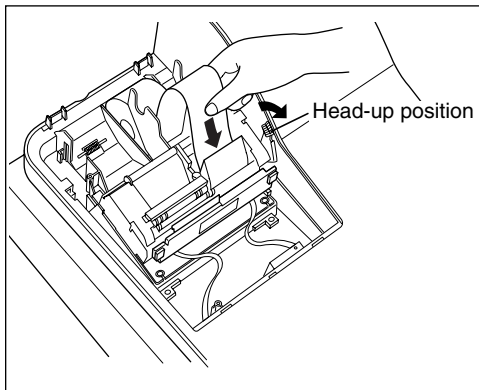
## Installing the journal paper roll





1. Turn the mode switch to the "REG" position with the AC cord connected.
2. Remove the printer cover.
3. Check that the print head release lever is in its printing position.
4. Set the paper correctly as illustrated on the previous page in the journal side of the printer.
5. Insert the end of the paper into the paper chute as shown on the left. It will automatically be fed through the printer.
6. Insert the end of the paper into the slit in the paper take-up spool. (Press the  key to feed more paper through if required.)
7. Wind the paper two or three turns around the spool shaft.
8. Set the spool on the bearing.
9. Replace the printer cover.

### Note

- When it is difficult to insert paper into the paper chute, try inserting it again by following the steps described below.



1. Cut off the end of paper in a single straight cut.
2. Pull the print head release lever toward you to lift up the print head.
3. Insert the end of paper into the paper chute, while pressing the corresponding paper feed key ( key or  key).
4. When the end of paper comes out of the printer, release the feed key and return the print head release lever to its original position.
5. Press the feed key to feed more paper.

### In case of inserting the journal paper roll

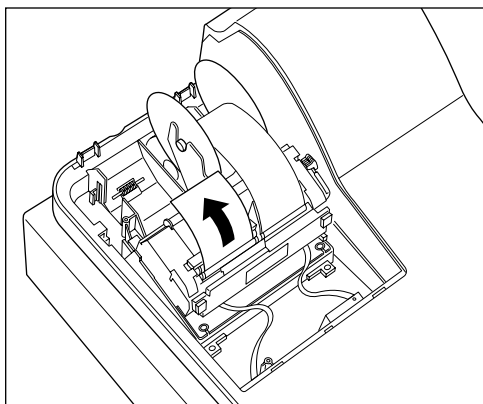
- When you want to manually install a new roll of paper while your machine is turned off, follow the steps shown below:


1. Pull the print head release lever toward you to lift up the print head.
2. Correctly place the new paper roll into the receipt/journal paper roll location.
3. Insert the paper end into the paper chute until it comes out of the printer.
4. Cut or roll the paper onto the take-up spool as described for automatic installation.
5. Return the print head release lever to its original position.

## ■ Removing the paper roll

When a red dye appears on the paper roll, it is time to replace the existing paper roll. Replace the paper roll with a new one. If you plan not to use your register for an extended period of time, remove the paper roll, and store it in the appropriate place.

### Removing the receipt paper roll

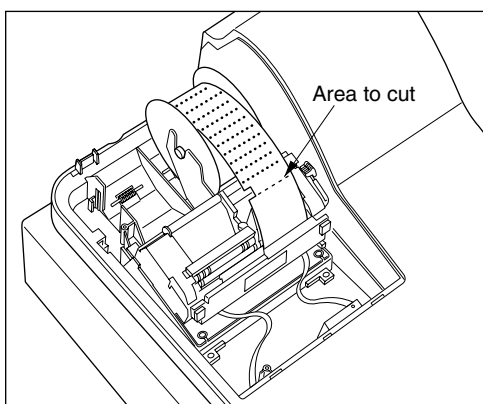



1. Remove the printer cover.
2. Cut the paper behind the printer and near the paper roll.
3. Press the  key until the paper remaining in the printer comes out completely.
4. Remove the paper roll from the back of the printer.

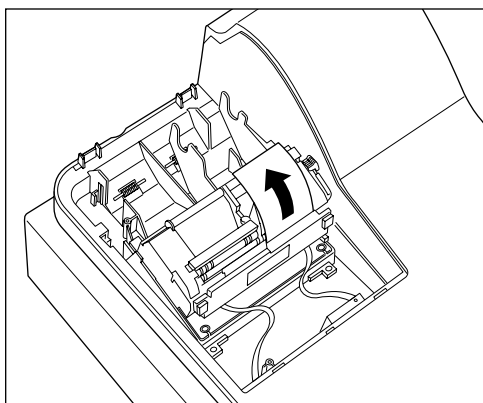
#### **Note**


*Do not pull the paper through the printer.*

### Removing the journal paper roll



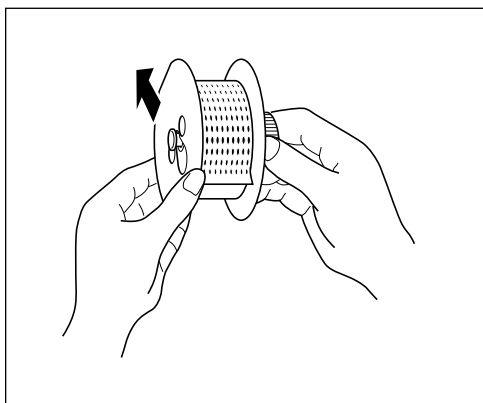
1. Remove the printer cover.
2. Press the  key to advance the journal paper until its printed part is out of the way.
3. Cut the paper and remove the take-up spool.



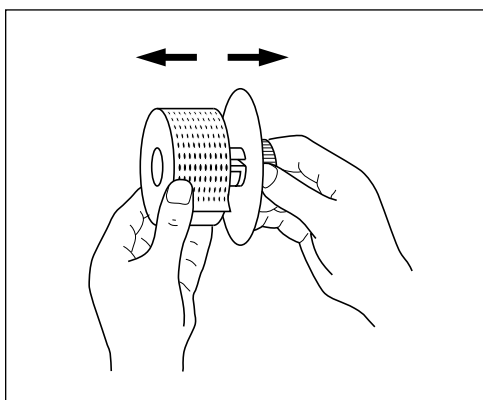
4. Cut the paper behind the printer and near the paper roll.
5. Press the  key until the paper remaining in the printer comes out completely.
6. Remove the paper roll from the back of the printer.

#### **Note**

*Do not pull the paper through the printer.*



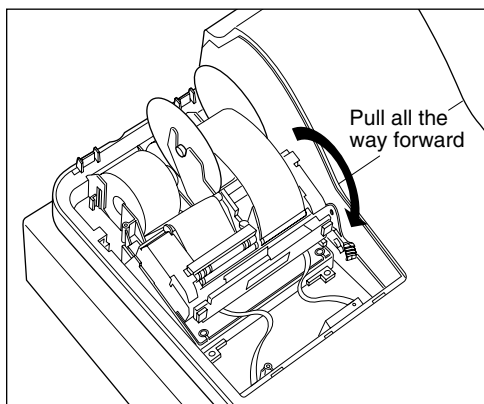
7. Remove the outer side of the take-up spool as shown on the left.



8. Remove the printed journal roll from the take-up spool.

## ■ Removing a paper jam

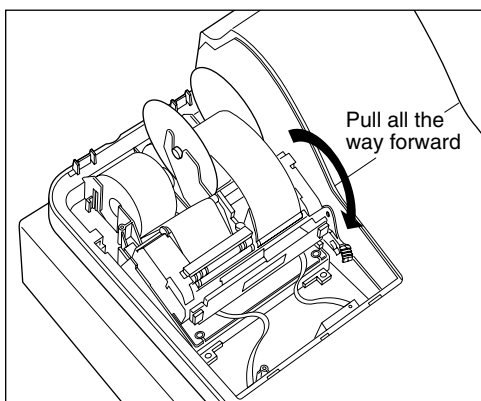
**Precaution:** Be very careful with the manual cutter, so as not to cut yourself. Never touch the print head immediately after printing, because the head may still be hot.



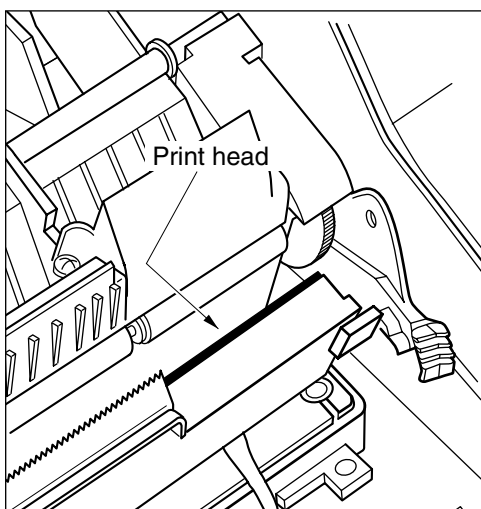
1. Remove the printer cover.
2. Pull the print head release lever all the way forward (after it stops at one position, continue pulling forward until it stops again and cannot be pulled forward any further).
3. Remove the paper jam. Check for and remove any shreds of paper that may remain in the printer.
4. Reset the paper roll correctly by following the steps in "Installing the paper roll".
5. Return the print head release lever to its original position.
6. Replace the printer cover.

## 5 Cleaning the print head

When the printed text is getting dark or faint, paper dust may be stuck to the print head. Clean the print head as follows:



1. Turn the mode switch to the "⓪" position.
2. Remove the printer cover.
3. Pull the print head release lever all the way forward (after it stops at one position, continue pulling forward until it stops again and cannot be pulled forward any further).



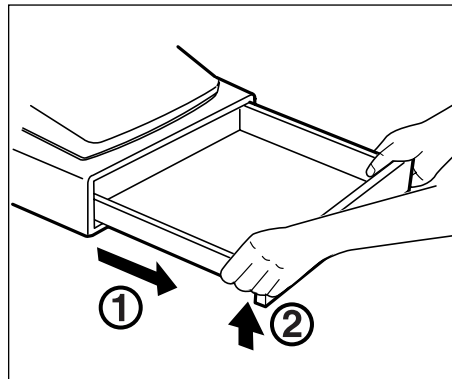
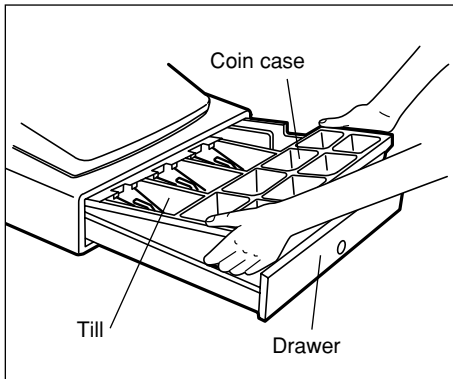
4. Clean the print head with a soft rag moist with ethyl alcohol or isopropyl alcohol.
5. Return the print head release lever to its original position immediately after cleaning.
6. Replace the printer cover.

### Precautions:

**Never touch the print head with a tool or anything hard as it may damage the head.**

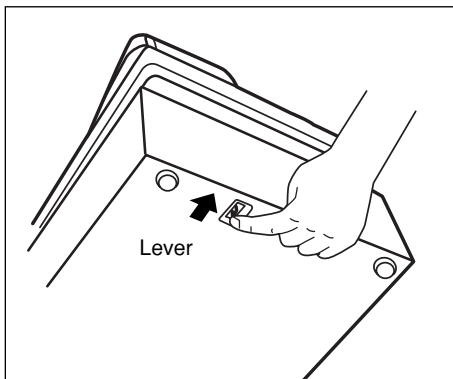
## 6 Removing the till and the drawer

The till in the register is detachable. After closing your business for the day, remove the till from the drawer and keep the drawer open. The coin case is also detachable from the till. To detach the drawer, pull it forward fully with the till removed, and remove it by lifting it up.



## 7 Opening the drawer by hand

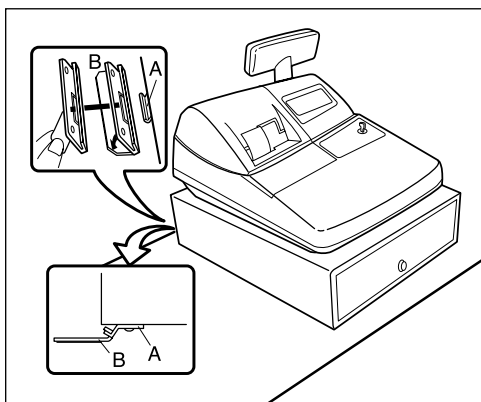
The drawer automatically opens in the usual way. However, when power failure is encountered or the machine becomes out of order, slide the lever located on the machine bottom toward the rear. (See the figure below.) The drawer will not open, if it is locked with a drawer lock key.



## 8 Installing the fixing angle bracket

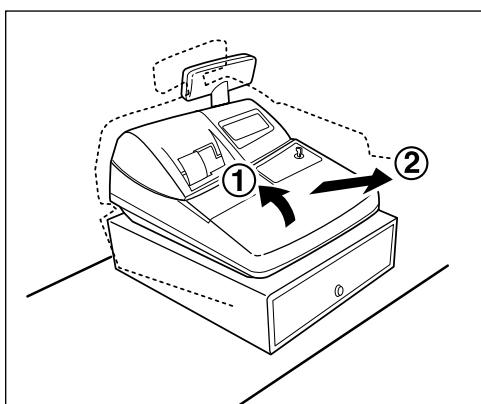
To prevent the register from moving when the drawer opens, the fixing angle bracket is supplied with the register. By attaching the bracket to the table where the register is installed, you can hook the register on this bracket and secure the register to its position.

### How to install the fixing angle bracket



1. Thoroughly clean the location where the fixing angle bracket (B) is to be placed.
2. Peel off the adhesive tape on the fixing angle bracket.
3. Hook the angle bracket onto the hook (A) that is located at the bottom rear of the register.
4. Firmly stick the fixing angle bracket to the table surface that you cleaned above.

### How to remove the register from the fixing angle bracket



1. Lift up the front of the register and pull the register towards you.

## 9 Before calling for service

The malfunctions shown in the left-hand column below, labelled "Fault," do not necessarily indicate functional faults of the machine. It is therefore advisable to refer to the "Checking" shown in the right-hand column before calling for service.

Fault	Checking
(1) The display won't be illuminated even when the mode switch is turned to any other position than "0".	<ul style="list-style-type: none"> <li>• Is power supplied to the electrical outlet?</li> <li>• Is the power cord plug out or loosely connected to the electrical outlet?</li> </ul>
(2) The display is illuminated, but the whole machine refuses registrations.	<ul style="list-style-type: none"> <li>• Is a cashier code assigned to the register?</li> <li>• Is a clerk code assigned to the register?</li> <li>• Is the mode switch set properly at the "REG" position?</li> </ul>
(3) No receipt is issued.	<ul style="list-style-type: none"> <li>• Is the receipt paper roll properly installed?</li> <li>• Is there a paper jam?</li> <li>• Is the receipt function in the "OFF" status?</li> <li>• Is the print head release lever at the printing position?</li> </ul>
(4) No journal paper is taken up.	<ul style="list-style-type: none"> <li>• Is the take-up spool installed on the bearing properly?</li> <li>• Is there a paper jam?</li> </ul>
(5) Printing is unusual.	<ul style="list-style-type: none"> <li>• Is the print head release lever at the printing position?</li> <li>• Is the paper roll properly installed?</li> </ul>

## ■ Error message table

Text no.	Description	In default of programming
1	Registration error	ENTRY ERROR
2	Misoperation error	MISOPERATION
3	Desired code is not programmed yet.	NO RECORD
4	(Reserved)	
5	Secret code error	SECRET CODE
6	(Reserved)	
7	Memory is full.	MEMORY FULL
8	Insert slip paper.	INSERT SLIP
9	The entered cashier code is not authorized.	NO AUTHORITY
10	Stock is empty.	OUT OF STOCK
11	Compulsory pushing the subtotal key	SBTL COMPUL.
12	Compulsory tendering	TEND COMPUL.
13	Compulsory PBAL	PB COMPUL.
14-21	(Reserved)	
22	Overlapped cashier error	CASHIER ERR.
23	Cashier resetting over error	ENTRY ERR CA
24-26	(Reserved)	
27	Power off	POWER OFF
28-30	(Reserved)	
31	Compulsory non-add code	# COMPULSORY
32	The cashier/clerk is not assigned.	NOT ASSIGNED
33	(Reserved)	
34	Overflow limitation	OVER LIMIT.

Text no.	Description	In default of programming
35	The open price entry is inhibited.	INH. OPEN PR
36	The unit price entry is inhibited.	INH. UNIT PR
37	The direct non-tendering finalization after previous tender entry is inhibited.	NOT NON-TEND
38-66	(Reserved)	
67	REG buffer is full.	BUFFER FULL
68-71	(Reserved)	
72	EFT error	EFT ERROR
73	EFT connection is broken.	EFT BREAK
74-75	(Reserved)	
76	Closing the drawer is compulsory.	CLOSE DRAWER
77-80	(Reserved)	
81	Entry of secret code is needed.	ENTR SECRET#
82-83	(Reserved)	
84	Data backup send success	SEND OK
85	Data backup receive success	RECEIVE OK
86	Data backup communication error	COM. ERROR
87	Backup data format error	DATA ERROR
88	Data backup time out error	TIME OUT
89-94	(Reserved)	
95	EURO change compulsory	EURO CHANGE

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# LIST OF OPTIONS

For your register, the following options are available.

For details, contact your dealer.

- Remote drawer model ER-03/04/05/06DW

- Key kit models

By using the following key kits, you can change the keyboard layout of your register including the expansion of the number of departments.

ER-11KT7: 30 regular size key kits

ER-12KT7: 30 1 x 2 size key kits

ER-22KT7: 10 2 x 2 size key kits

ER-11DK7G: 30 regular size dummy key kits

ER-51DK7G: 10 5 x 1 size dummy key kits

- EFT interface model ER-03EF





# SPECIFICATIONS

Model:	ER-A410/A420	
Dimensions:	355 (W) x 424 (D) x 305 (H) mm	
Weight:	ER-A410: 12.2 kg / ER-A420: 12.1 kg	
Power source:	Official (nominal) voltage and frequency	
Power consumption:	Stand-by 11 W	
	Operating 49 W (max.)	
Working temperature:	0 °C to 40 °C	
Electronics:	LSI (CPU) etc.	
Built-in battery:	Rechargeable battery, memory holding time about 1 month (with fully charged built-in battery, at room temperature)	
Display:		
Operator display:	LCD dot-matrix display (16 positions x 2 lines)	
Customer display:	7-segment display (7 positions)	
Printer:		
Type:	2-station thermal printer	
Printing speed:	Approx. 13.3 lines/second	
Printing capacity:	24 digits each for receipt and journal paper	
Other functions:	• Graphic logo printing function	
	• Logo text printing function	
	• Receipt (ON-OFF) function, journal selective function	
	• Receipt and journal independent paper feed function	
Paper roll:	Width: 44.5 ± 0.5 mm	
	Max. diam.: 80 mm	
	Quality: High quality (0.06 to 0.08 mm thickness)	
Cash drawer:	5 slots for bill and 8 for coin denominations	
Accessories:	Manager key	2
	Submanager key	2
	Operator key	2
	Drawer lock key	2
	Paper roll	2
	Take-up spool	1
	Standard key sheet	1 (mounted on the keyboard)
	Programming key sheet	1 (mounted on the keyboard)
	Fixing angle bracket	1
	Instruction manual	1 copy

\* Specifications and appearance subject to change without notice for improvement.

## FOR CUSTOMERS IN U.K.

### IMPORTANT

The wires in this mains lead are coloured in accordance with the following code:

**BLUE:**

**Neutral**

**BROWN:**

**Live**

As the colours of the wires in the mains lead of this apparatus may not correspond with the coloured markings identifying the terminals in your plug proceed as follows.

The wire which is coloured **BLUE** must be connected to the terminal which is marked with the letter **N** or coloured black.

The wire which is coloured **BROWN** must be connected to the terminal which is marked with the letter **L** or coloured red.

The apparatus must be protected by a 3A fuse in the mains plug or distribution board.

**CAUTION: DO NOT CONNECT THE LIVE (BROWN) WIRE OR THE NEUTRAL (BLUE) WIRE TO THE EARTH TERMINAL OF YOUR 3-PIN MAINS PLUG.**

### Environment Protection

The device is supported by a battery. To dispose the battery safely to protect the environment, please note the following points:

- Take the used battery to your local waste depot, dealer or customer service centre for recycling.
- Do not throw the used battery into fire, into water or into the household waste!

### Umweltschutz

Das Gerät wird durch eine Batterie gestützt. Um die Batterie sicher und umweltschonend zu entsorgen, beachten Sie bitte folgende Punkte:

- Bringen Sie die leere Batterie zu Ihrer örtlichen Mülldeponie, zum Händler oder zum Kundenservice-Zentrum zur Entsorgung.
- Werfen Sie die leere Batterie niemals ins Feuer, ins Wasser oder in den Hausmüll.

### Protection de l'environnement

L'appareil est supporté sur pile. Afin de protéger l'environnement, nous vous recommandons de traiter la pile usagée la façon suivante:

- Apporter la pile usagée à votre centre de traitement des ordures ménagères le plus proche ou, à votre revendeur ou, au service après-vente, pour recyclage.
- Ne jamais jeter la pile usagée dans une source de chaleur, dans l'eau ou dans les vide-ordures.

### Miljöskydd

Denna produkt nöddrivs av batteri.

Vid batteribyte skall följande iakttas:

- Det förbrukade batteriet skall inlämnas till er lokala handlare eller till kommunal miljöstation för återinssamling.
- Kasta ej batteriet i vattnet eller i hushållssoporna. Batteriet får ej heller utsättas för öppen eld.

